

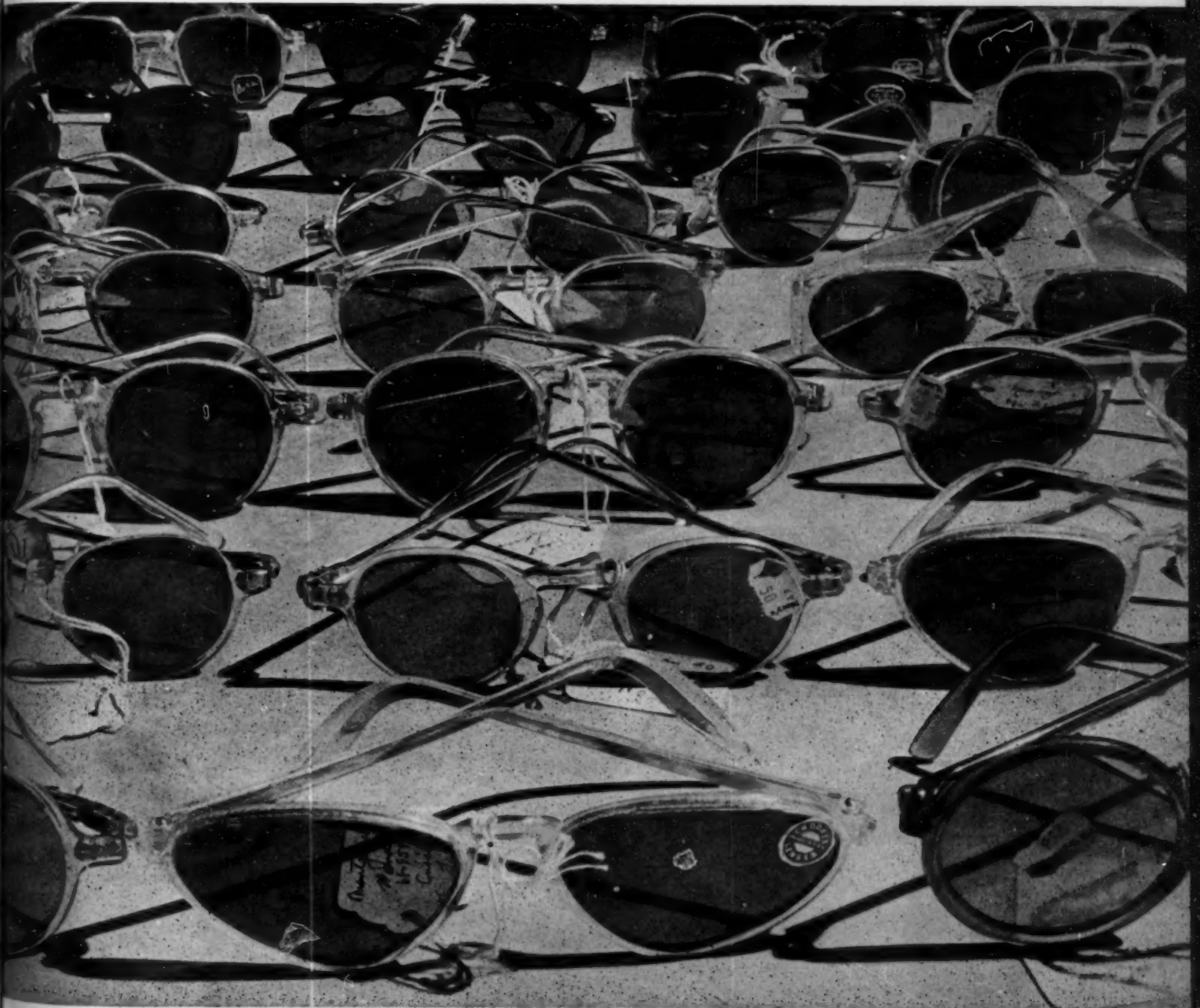
Consumer Reports

"FACTS YOU NEED
BEFORE YOU BUY"

VOL. 9, NO. 7

Published Monthly by Consumers Union

JULY 1944



SUNGLASSES
GARDENING

LEG COSMETICS
ICE CREAM MIX

CLUB SODA
GINGER ALE

CANNED CORN
FLOUR MIXES

CU Members Report:

A few typical comments and opinions written by members as "Remarks" on the Annual Questionnaire

As a retired minister-editor, my chief source of income is a pension. I am chiefly interested in social and political action that will right the evils you are so effectively exposing. How can the power of political corruption in both parties be broken so that the people can do some real electing? Letter-writing does not fill the bill. . . .

★

I think you are doing a fine job and hope you continue along the same lines. With the help now given by CU, no one need go astray in buying. . . .

★

Consumers Union Reports are excellent. They have aided me considerably in my teaching of Applied Chemistry. . . .

★

I first became acquainted with your organization in college, where it was considered authoritative. I still have complete faith in your reports. You fill a great need in the average American home.

★

I rate CU as the association doing the most to educate the grownup common person. You are doing a wonderful job. The common person has not the money or the brains to inspect every item he uses. We are grateful to CU because we feel your union can be trusted. . . . Especially after the war when many new gadgets come onto the market, the public will need your union more than ever.

★

I like the Reports very much, in fact would be "lost" without the service. . . . I personally would like to have the Annual Buying Guide much more com-

plete. Possibly I use the Guide a little differently than some members do. I have it with me all the time in my car and really use it when I make a purchase that amounts to very much. . . .

★

I greatly appreciate the sections "For the People," "News & Information," and "Labor" news because you state facts that we get nowhere else and I like to know the truth. . . .

★

Do not make a sacred cow of labor. Be fair to both management and labor. Not all union policies are worthy of support; not all manufacturers are evildoers. Point out in your Reports any praiseworthy progressive policies of big business and support them where needed, as you did recently in the case of the Zenith Corp. Promote cooperation between management and labor with all your might, and impartially. One cannot exist or prosper without the other, and both are essentially consumers. . . .

★

Suggest that you "keep to your last" by developing rating and discussion of materials, supplies and home equipment and that you leave alone such controversial subjects as religion, baseball, the Wagner Bill, politics, etc.

★

Think CU too heavy on political subjects and apparent trend heavily to New Deal. Did not like Montgomery Ward as example of one-sidedness.

★

Highly approve of your method of presentation and find everything in Reports of value.

CONSUMERS UNION is a non-profit organization chartered under the Membership Corporation Laws of New York State. Its purpose is to furnish unbiased, usable information to help families meet their buying problems, get their money's worth in their purchases, develop and maintain an understanding of the forces affecting their interests as consumers. Consumers Union has no connection with any commer-

cial interest and accepts no advertising; income is derived from the fees of members, each of whom has the right to vote for candidates to the Board of Directors. More than 70 educators, social workers and scientists sponsor Consumers Union and a national advisory committee of consumer leaders contributes to the formulation of policy (names of the members of the committee will be furnished on request).

CONSUMER REPORTS each month gives comparative ratings of a variety of products based on tests and expert examinations, together with general buying guidance, information on medical and health questions, and news of happenings affecting the consumer's interests. The Reports is the manual of informed and efficient consumers the country over.

THE BUYING GUIDE (published as the December issue of the Reports) each year brings together information from all the preceding issues with new material and special buying advice. Pocket-size, 384 pages, with ratings of several thousand products, the Buying Guide is an invaluable shopping companion. Every member gets a copy of the Guide with his membership.

BREAD & BUTTER reports each week on new and predicted price and quality changes in consumer goods, interprets Washington legislation as it affects consumers, reports government regulations and actions on the consumer front, advises on food buying and preparation.

SUBSCRIPTION FEES are \$4 a year, which includes subscription to the Reports and Buying Guide and Bread & Butter; \$3.50 without Bread & Butter (for foreign and Canadian memberships add 50¢). Reduced subscription rates are available for groups of 10 or more

(write for details). Library rates, for the Reports and Bread & Butter without the Buying Guide issue, are \$3.50; for the Reports alone, \$3.

Membership involves no obligation whatsoever on the part of the member beyond the payment of the subscription fee.

CU and Labor

Over the years, CU members have shown their overwhelming support for the organization's pro-labor policy; and this, despite the fact that relatively few members belong to unions and a great many are in the higher income brackets.

But there are some members who don't approve. There are some, to judge from letters they have written us, who suffer violent attacks of nausea every time we say a good word about labor in the *Reports*. In view of the kind of language they've hurled at us, we're afraid they won't like our saying that we think they're terribly wrong. They remind us of those Americans who, even at this date in history, regret that the Russians are our allies.

These letter writers typify a sizeable group in the population to whom all labor leaders are racketeers, and to whom every union is an enemy to be fought and wiped out.

We think they're wrong because if they should succeed in destroying the unions they would be striking a blow at their own future security and their children's. The reason is not an obscure one. It is simply necessary to recognize what such industrial leaders as Henry J. Kaiser have recognized—that organized labor can be a powerful stabilizing force at a time when war-time technological developments threaten to destroy stability. Once the business of war is finished we will need the unions as we have never needed them before to help in the tremendously difficult job of changing over to an economy of abundance for all.

PURCHASING POWER NEEDED

Because of what has happened in the war years to the productivity of men and machines, the experts are agreed that we cannot have a stable economy unless we produce about twice as much peacetime goods as we ever produced before. But producing for peace is a different matter from producing for war. Autos and washing machines and houses can't be disposed of by being shot at an enemy or dropped out of bomb bays at the expense of tax payers. Somebody has to buy them. And no matter how much foreign trade, capital investment and accumulated demand there is, consumption won't keep up with production over a period of years unless the whole population has enough money to buy a good deal more than bare necessities.

An economy of abundance simply cannot survive without abundance of purchasing power. We will no longer have to compete for scarce goods. On the contrary, an increase in the purchasing power of any group will help provide jobs, income and higher purchasing power for all the rest. But if any group stops buying, all will suffer. This means that everything the unions can do to provide job security, everything they can do to keep wage levels up after the war will help all of us.

Some people are against the unions because there are racketeers among union officials. Of course there are racketeering unionists. But so are there racketeers in business and in government. And old *Reports* readers will even remember a man named Lane who tried a little racketeering in the consumer movement. We hope that labor and all other racketeers get what they richly deserve. But it makes no more sense to oppose labor organization in general because of individual racketeers than it does to demand the end of government, business and the consumer movement because they have suffered infestations.

Consumer Reports

"FACTS YOU NEED BEFORE YOU BUY"

"Because it was established for the very purpose of aiding families to buy wisely, to avoid waste and to maintain health and living standards, and because it is the largest technical organization providing such guidance, Consumers Union recognizes a special responsibility to the nation. In full awareness of that responsibility, we pledge ourselves to do everything in our power to help Americans as consumers make the greatest possible contribution to the national need."—FROM A RESOLUTION ADOPTED ON DECEMBER 10, 1941, BY THE DIRECTORS.

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CORRESPONDENCE: should be addressed to Consumers Union, 17 Union Square, NYC (3). CU regrets that time does not permit answers to inquiries for special information.

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REPORTS ON PRODUCTS

Ratings of products represent the best judgment of staff technicians or of consultants in university, governmental and private laboratories. Samples for test are in practically all cases obtained on the open market by CU's shoppers. Ratings are based on laboratory tests, carefully controlled use tests, the opinion of qualified authorities, the experience of a large number of persons, or on a combination of these factors. Even with rigorous tests, interpretation of findings is a matter on which expert opinion often differs. It is Consumers Union's pledge that opinions entering into its evaluations shall be as free from bias as it is possible to make them.

Cosmetic Stockings

... are being worn more this season than ever before. Here CU rates 54 brands of lotion-type leg cosmetics, and gives some suggestions on how to apply them

Call them liquid stockings, leg cosmetics, stockings out of a bottle, or just plain leg paints. But whatever you call them, the fact is that what was a fad back in the days of silks and nylons is today a widespread Summer custom. And, in the opinion of many women who are using these stocking substitutes such cosmetic stockings will go right on flourishing, even when sheer silk and nylon stockings are back on the shelves. The reason: they're cheap, they're cool, they never sag at knees and ankles, and they can look as pleasing as stockings ever have.

The trick of getting a good-looking pair of cosmetic hose is a combination of selecting a good brand and then applying it correctly, CU concluded. The latter is fairly simple; you may spoil the first pair or two before you've mastered the technique, but after that it's no more difficult to pour yourself a pair of liquid stockings than to powder your nose or apply your lipstick. And it takes very little more time; about five minutes was found average.

MARKET CONDITIONS

The market in cosmetic stockings has changed considerably in the past year, CU's tests showed. Of the 58 brands of lotions tested a year ago (see the *Reports*, July, 1943) only 27 could be found in the stores for the current tests. An equal number of widely sold brands was added, however, to bring the total tested to 54 brands. Only the lotion type was included in current tests; previous ex-

perience showed that these are by far the most satisfactory variety. There have been many changes in the individual brands. Only one—*Sutton*—which rated excellent last year, retained its standing. Two—*Westmore* and *Delettrez*—dropped from "Excellent" to "Good," because the first water-spotted slightly and the second had a tendency to rub off. On the other hand, among those found excellent in current tests were *Perlac* and *Nina* (good a year ago), and *Jacqueline Cochran* (formerly poor).

HOW TO USE

There are a few precautions to be followed if your cosmetic stockings are to have a really professional appearance. First the legs should be free of hair. You may achieve the desired smoothness by shaving, which, contrary to popular belief, does not coarsen the hair; or by using a depilatory (for "Acceptable" types and brands, see the *Buying Guide*). Then apply the lotion in long, even strokes, from the foot to above the knee. Remember to fill in the hollows around the ankles and heels, and the backs of the knees; if you are wearing sandals, you'll have to apply paint along the edges of the soles, too, if you don't want a "water line" to show. After the make-up has dried thoroughly, buffing with the hands or with a soft cloth will remove any excess powder and give your "stockings" a slight sheen.

In testing the stockings, CU used a panel of seven "guinea pigs," who applied the lotion, according to direc-

tions, before coming to work in the morning, and wore it all day under normal working conditions. They were asked to note the ease and time of application, the appearance, and any tendency to rub off onto hems of skirts and slips. Technicians made further notations on appearance, and made tests on resistance to water-spotting or streaking.

Lotions rated "Excellent" had a good appearance, did not rub off, and were water-resistant to the extent that water dropped on them and then allowed to dry untouched did not leave any mark. Rated as "Good" were brands having good appearance, but which water-spotted slightly or had a tendency to rub off. Some of the latter might be rated "Excellent" if they were well buffed after application. Those which water-spotted slightly could be smoothed over when dry. But unless you have a firm guarantee from the weatherman that it's not going to rain, CU suggests that



Lotions which are not resistant to water will "run" if you get caught in the rain, giving a mottled, streaked look.

you avoid brands which are not water-resistant. The sad mess which may result from a sudden downpour looks far worse than stocking runs. Most of those considered "Fair" had good appearance, but were listed as "Fair" because they rubbed off or were not water-resistant.

The ratings which follow are in order of increasing cost per ounce within each group. Figures in parentheses represent cost per ounce; although there are variations among legs and brands, an ounce is roughly equivalent to four applications. Prices given do not include the 20% Federal cosmetic tax.

EXCELLENT

The following did not streak, had good appearance, did not rub off, and were water-resistant:

Gimbel's Leg Make Up (Gimbel Bros., NYC). 79¢ for 1 pint (4.9¢). Available in NYC, Philadelphia, Pittsburgh and Milwaukee at Gimbel's Dep't Stores.

Filene's Own Leg Make-Up (Wm. Filene's Sons Co., Boston). 89¢ for 1 pint (5.6¢). Available in Boston at Filene's Dep't Store.

Perlac Liquid Leg Make-Up (Perlac Products Co., NYC). 59¢ for 6 oz. (9.8¢). Available nationally.

Sutton Leg Color (Sutton Cosmetics, Inc., NYC). 59¢ for 6 oz. (9.8¢). Available nationally.

Lady Marlow Leg Make-Up (Lady Marlow Co., Hollywood, Calif.). 88¢ for 8 oz. (11¢). Available in Calif.

Rose Laird Leg Tone (Rose Laird, NYC). 94¢ for 8 oz. (11.8¢). Available nationally.

Chantrey Leg-Tone (L. Bamberger & Co., Newark, N. J.). \$1 for 8 oz. (12.5¢). Available in Newark at Bamberger's Dep't Store.

Frances Denney Leg Makeup Film (Frances Denney, Philadelphia). \$1 for 6 oz. (16.7¢). Available nationally.

Jacqueline Cochran Leg Makeup (Jacqueline Cochran, Roselle, N. J.). \$1 for 6 oz. (16.7¢). Available nationally.

Tattoo Leg Make-up (Associated Distributors, Chicago). \$1 for 4 oz. (25¢). Available nationally.

Nina Stockings Out of a Bottle (Produits Nina, Inc., NYC). \$1 for 2 oz. (50¢). Available nationally at department stores, but in limited supply.

GOOD

The following did not streak, had good appearance, but rubbed off or were not water-resistant, or both:

Carole Ann Leg Make-Up (Allied Toiletries, Inc., Philadelphia). 50¢ for 8 oz. (6.3¢). Not water-resistant. Available nationally.

Duration Leg-Do (Lehn & Fink Prod. Corp., Bloomfield, N. J.). 50¢ for 8 oz. (6.3¢). Rubbed off slightly. Available nationally.

Gaby Leg Make-Up (Gaby, Inc., Philadelphia). 47¢ for 6 oz. (7.8¢). Water-spotted slightly. Available nationally.

Westmore's Leg Make-Up (House of Westmore, Inc., Hollywood, Calif.). 25¢ for 3 oz. (8.3¢). Not water-resistant. Available nationally.

Ann Barton Leg Makeup Cat. No. — 5774 (Sears, Roebuck). 35¢ for 4 oz. (8.8¢). Not water-resistant. Available nationally by mail order.

Macy's Hose-Tex (R. H. Macy & Co., NYC). 74¢ for 8 oz. (9.3¢). Rubbed off slightly. Available in NYC at Macy's Dep't Store.

Dorothy Gray Leg Show (Dorothy Gray, Ltd., NYC). \$1 for 10 oz. (10¢). Rubbed off slightly. Available nationally.

Leg Sheen (Franklin Simon, NYC). \$1 for 8 oz. (12.5¢). Rubbed off slightly. Available in NYC at Franklin Simon's Dep't Store.

Satin Glow Cosmetic Hose (The Fair, Chicago). 82¢ for 6 oz. (13.7¢). Rubbed off slightly. Available at the Fair, Chicago.

Alexandra de Markoff Cosmetic Stocking (Alexandra de Markoff Salon, NYC). \$1 for 6 oz. (16.7¢). Rubbed off slightly and was not water-resistant. Available nationally.

Chiffon Liquid Hosiery (Primrose House, NYC). \$1 for 6 oz. (16.7¢). Rubbed off slightly. Available nationally.

Delettrez Liquid Leg Make-Up (Delettrez, NYC). \$1 for 6 oz. (16.7¢). Rubbed off slightly. Available nationally.

Velva Leg Film (Elizabeth Arden, NYC). \$1 for 5 oz. (20¢). Rubbed off. Available nationally.

DuBarry Leg Make-Up (Richard Hudnut, NYC). \$1 for 5 oz. (20¢). Rubbed off slightly. Available nationally.

FAIR

The following did not streak, had fair appearance, and rubbed off or were not water-resistant, or both:

Elizabeth Post Leg Make-Up (Elizabeth Post, NYC). 10¢ for 3 oz. (3.3¢). Rubbed off and was not water-resistant. May streak if not applied rapidly. Available nationally at Kress Stores.

Eatons Leg Make-Up (Eaton Laboratories, Merchandise Mart, Chicago). 33¢ for 6 oz. (5.5¢). Rubbed off.

La Bonita Hollywood Leg Make-Up (House of Hollywood, Hollywood, Calif.). 25¢ for 4 oz. (6.3¢). Rubbed off and tended to cake on legs. Available nationally.

Elizabeth Kent Stocking Make-Up (Elizabeth Kent, Inc., NYC). 25¢ for 4 oz. (6.3¢). Not water-resistant. Available nationally.

Professional Leg Make-Up (Lander, NYC). 25¢ for 4 oz. (6.3¢). Rubbed off and was not water-resistant. Available nationally at 10¢ stores.

Howe's Hollywood Leg Make-Up (Howe & Co., Seattle). 25¢ for 3½ oz. (7.1¢). Rubbed off and was not water-resistant. Available nationally.

Ishbel Leeds Leg Make-Up (Ishbel Leeds, NYC). 29¢ for 4 oz. (7.3¢). Rubbed off. Available nationally at 10¢ stores.

Consumers' Special Liquid Leg-coat (Special Formula Corp., NYC). 50¢ for 6 oz. (8.3¢). Rubbed off slightly and was not water-resistant. Available nationally.

Lorr Leg Tan (Lorr Laboratories, Paterson, N. J.). 25¢ for 3 oz. (8.3¢). Rubbed off. Available East of Chicago at Woolworth Stores.

Mavis Liquid Hose (V. Vivadou, Inc., NYC). 25¢ for 3 oz. (8.3¢). Rubbed off slightly. Dries quickly, so must be applied rapidly. Available nationally.

Miner's Liquid Make-Up (Miner's, Inc., NYC). 50¢ for 6 oz. (8.3¢). Rubbed off. Available nationally.

Tussy Show-Off (Lehn & Fink Prod. Corp.). 50¢ for 6 oz. (8.3¢). Rubbed off. Available nationally.

Blanchard Liquid Hosiery (Parfum Blanchard, NYC). 59¢ for 6 oz. (9.8¢). Rubbed off and was not water-resistant. Available nationally.

CD Cosmetic Stockings (Cooperative Distributors, Inc., NYC). 59¢ for 6 oz. (9.8¢). Rubbed off and was not water-resistant. Available in NYC at Cooperative Distributors or by mail order.

Trique Smooth-On Hose (Anre Distributors, NYC). \$1 for 8 oz. (12.5¢). Rubbed off and was not water-resistant. Available nationally.

Venida Liquid Hosiery (Rieser Co., NYC). 50¢ for 4 oz. (12.5¢). Rubbed off and was not water-resistant. Available nationally.

Daggett & Ramsdell Leg Make-Up (Daggett & Ramsdell, NYC). \$1 for 6 oz. (16.7¢). Rubbed off slightly and was not water-resistant. Available nationally.

Leg Silque Liquid Stockings (Langlois, Inc., Boston). \$1 for 6 oz. (16.7¢). Rubbed off and was not water-resistant. Available nationally.

Charbert Leg Make-Up (Parfums Cherbert, NYC). \$1 for 6 oz. (16.7¢). Rubbed off and was not water-resistant. Available nationally.

Charles of the Ritz Leg Make-Up (Charles of the Ritz, NYC). \$1 for 6 oz. (16.7¢). Rubbed off and was not water-resistant. Available nationally.

Leg Tone (Wallace Laboratories, NYC). \$1 for 6 oz. (16.7¢). Rubbed off slightly and was not water-resistant. Available nationally.

Sheertone Stockings (Elizabeth Rae-La-

mont, NYC). \$1 for 6 oz. (16.7¢). Rubbed off.

Seventeen Skinthetic Leg Make-Up (Maison Jeunelle, Inc., NYC). \$1 for 6 oz. (16.7¢). Rubbed off and was not water-resistant. Available nationally.

Kay daumit Su-Do Stockings (Kay daumit, Chicago). \$1 for 4 oz. (25¢). Rubbed off and was not water-resistant. Available nationally except in Montana, Idaho, Utah, New Mexico and Maine.

Aquacade Leg Lotion (Helena Rubinstein, Inc., NYC). \$1 for 4 oz. (25¢). Rubbed off and was not water-resistant. Available nationally.

Harriet Hubbard Ayer Stocking Lotion—Powder Type (Harriet Hubbard Ayer, NYC). \$1 for 4 oz. (25¢). Rubbed off and was not water-resistant. Available nationally.

Lenthéric Soft-Focus Leg Make-Up (Lenthéric, NYC). \$1 for 4 oz. (25¢). Rubbed off. Available nationally.

POOR

The following were streaked in appearance, even when carefully applied:

Fad Leg Make Up (Fad Beauty Products Corp., NYC). 59¢ for 16 oz. (3.7¢). Rubbed off; not water-resistant.

Americ Leg Make-Up (Marshall Field & Co., Chicago). 60¢ for 7¼ oz. (7.7¢). Rubbed off.

Antoine Stocking Stand-In (Antoine De Paris, NYC). \$1 for 4 oz. (25¢). Was not water-resistant.

CLUB SODA

They may seem to fizz about alike when you open the bottles, but tests show considerable differences among the widely available brands.

"Taking the waters" is as much a social function today as it was in the nineteenth century. But the scene has shifted from the health spa to the corner drug store and the cocktail lounge. And though some of the waters still make claims of health-giving properties, today carbonated beverages are used mainly as "mixes" or, flavored, as drinks in their own right.

Nor, since the late 18th century when the chemist Priestley discovered that he could duplicate the taste of the popular product of mineral springs by impregnating ordinary water with carbon dioxide, has the spa been the exclusive source. To make carbonated water, carbon dioxide, a heavy, colorless, odorless and quite harmless gas is dissolved in water under pressure. The carbonic acid thus formed gives the beverage its fizz and tang. Quality depends principally upon the degree of carbonation—the higher it is, the better the fizz and flavor—and the ability to retain carbonation after the bottle is opened.

TESTING FOR QUALITY

CU technicians examined one to three bottles of each of 23 brands of carbonated water—"club soda" or "sparkling water"—and 23 brands of ginger ale. These were tested for degree of carbonation, initial and retained; for color, odor and flavor; and for clarity and sediment. In tests on the ginger ales, the amounts of



Testing for original and retained carbonation is done by means of a special gauge inserted through the bottle cap.

sugar and acid were also determined.

A specially designed pressure gauge and needle were used to measure the amount of carbonation, both original and retained—the determining factor in the ratings.

After the amount of initial carbonation was measured, the bottles were left at room temperature for definite periods, and then retested for retained carbonation. Since carbonated waters get "flat" more quickly than do ginger ales, the carbon dioxide retention was checked at more frequent intervals for them. For club sodas, the check periods were 15 minutes, 30 minutes, one hour and two hours after the bottles were opened. Ginger ales were checked 15 minutes, one hour and four hours after opening.

Generally speaking, the club sodas were pretty flat at the end of a half hour, having lost 50% to 70% (in

GINGER ALE

This report gives ratings of 23 brands of club soda and 23 brands of ginger ale, based on the original and the retained carbonation.

some cases even more) of their original carbonation. Ginger ale, on the other hand, retained as much as 70% of its original fizz after standing at room temperature for an hour. Both sodas and ginger ales lose their bubbles at a much slower rate if the opened bottles are properly stoppered (see box) and kept in the refrigerator. Even without a stopper, in fact, carbonated water will still fizz after two hours if it is kept at refrigerator temperature.

GINGER ALE—SWEET OR DRY?

The flavor and color of ginger ale are imparted by sugar, citric acid (natural or synthetic) and caramel color added to the water and gas. Originally, "pale dry" meant that the ginger ale was lighter and less sweet than the "golden" variety. Now, practically all are called either "pale" or "dry" or both, and the terms have ceased to mean anything. As a matter of fact, the sample which had the highest sugar content of all brands tested — 8.5% — was *American Dry Pale Dry*; the brand which contained the least sugar—4.6%—was *Cliquot Club Golden*. Actually, the lower the sugar content and the higher the acid content (see comments in ratings), the drier the ginger ale will be.

Sugar rationing has apparently had some effect on the percentage of sugar in ginger ales today. When CU last tested them in June 1940, sugar content ranged from 6.8% to 10.8%

with an average of 8.5%; in the 1944 test the range was from 4.6% to 8.5% with an average of 6.75%. In the ratings, "low sugar" means below 6.5%; "medium sugar," between 6.5% and 7%; "high sugar," over 7%. The citric acid content of the ginger ales in this test was practically the same as in 1940.

REGIONAL VARIABILITY

In an attempt to find out to what extent a national brand with bottling plants all over the country produced a consistent product, CU shoppers bought samples of *Canada Dry Water* and *Canada Dry Ginger Ale* in New York, Chicago, Los Angeles, St. Louis, San Antonio and Birmingham. Carbonation, both original and retained, was quite consistent.

In the ginger ales, the acid content showed only very slight variations, while the sugar content varied as much as two percent—New York and Birmingham having the highest (about 8%) and San Antonio the lowest (6.1%). This may be a matter of regional preference.

Since none of the carbonated waters or ginger ales had any off-flavors, ratings are based on scores made in the tests for original and retained carbonation. Sugar and acid content of the ginger ales is noted in the ratings. Prices are variable from place to place, and very often these beverages are cheaper when more than one bottle is bought at one time. Wherever possible, the price given is an average of the prices paid by CU in different purchases of the same brand.

The figures in parentheses represent cost per pint.

CLUB SODAS

BEST BUYS

The following were considered to give the best value for the money in the order given:

Belfast (New Century Beverage Co., San Francisco). 10¢ for 29 oz. (5.5¢). Available in Central and Northern California.

Yukon Club (A&P). 9¢ for 1 pt. 13 oz. (5¢). Available nationally at A&P Stores.

Pomeroy (Everbest Food Prod., Inc., NYC). 8¢ for 1 pt. 12 oz. (4.6¢).

ACCEPTABLE

(In estimated order of quality)

Belfast (see "Best Buys").

Yukon Club (see "Best Buys").

Canada Dry (Canada Dry Ginger Ale, Inc., NYC). 15¢ for 1 pt. 12 oz. (8.6¢). Available nationally.

Yosemite (Yosemite Beverage Co., San Francisco). 15¢ for 1 qt. (7.5¢). Available in San Francisco Bay area.

Carlton Club (Canada Dry Ginger Ale Co.). 14¢ for 1 pt. 12 oz. (8¢). Available nationally.

Pomeroy (see "Best Buys").

Rob Roy Sparkling Club Soda (American Stores Co., Philadelphia). 11¢ for 1 qt. (5.5¢). Not to be confused with **Rob Roy Sparkling Water**, listed below. Available nationally at American Stores.

Hoffman (Hoffman Beverage Co., Newark, N. J.). 15¢ for 1 pt. 13 oz. (8.3¢). Available nationally.

Briargate (Walgreen Co., Long Island City, N. Y.). 20¢ for 1 pt. 12 oz. (11.4¢). Available nationally at Walgreen Stores.

Myer 1890 (Myer Prod., Inc., NYC). 15¢ for 1 pt. 13 oz. (8.3¢). Available in NYC and Newark.

C & C (Cantrell & Cochran, Ltd., Long Island City, N. Y.). 20¢ for 1 pt. 13 oz. (11¢). Available nationally in limited supply.

American Home (National Tea Co., Chicago). 7¢ for 1 pt. 8 oz. (4.7¢). Available in the Midwest at National Tea Stores.

Shasta (Shasta Water Co., San Francisco). 12.5¢ for 1 qt. (6.3¢). Of three bottles tested, one had only half the carbonation of the other two; retention variable. Available on Pacific Coast.

Kelly Dry (Kelly Dry Ginger Ale Co., Long Island City, N. Y.). 15¢ for 1 pt. 13 oz. (8.3¢). Available in New York State.

Millbrook Club (First National Stores, Inc., Somerville, Mass.). 8¢ for 1 pt. 12 oz. (4.6¢). Available in New England and New York at First National Stores.

Bohack's (H. C. Bohack Co., Brooklyn, N. Y.). 7¢ for 1 pt. Available in Brooklyn and Long Island at Bohack Stores.

Cliquot Club Sparkling Water (Cliquot

Club Co., Millis, Mass.). 12.5¢ for 1 qt. (6.3¢). Original carbonation and retention of three bottles varied from high to very low.

Rob Roy Sparkling Water (American Stores Co.). 5¢ for 12 oz. (6.7¢). Original carbonation practically the same as **Rob Roy Sparkling Club Soda**, above, but retention not as good. Available nationally at American Stores.

Grisdale (Gristede Bros., Inc., NYC). 12¢ for 1 pt. Available in New York and Connecticut at Gristede Stores.

Penguin (Grand Union Co., NYC). 12¢ for 1 pt. 13 oz. (6.6¢). Of three bottles tested, two had low and one, very low original carbonation.

NOT ACCEPTABLE

The original carbonation of the following brands was too low to warrant an "Acceptable" rating:

Schneider's Grand Prize (George Schneider & Co., Brooklyn, N. Y.). 12¢ for 1 pt. 13 oz. (5¢).

Macy's Green Label (R. H. Macy & Co., NYC). 11¢ for 1 pt. 8 oz. (7.3¢).

Kroger's Latonia Club (Kroger Grocery & Baking Co., Cincinnati). 6.5¢ for 1 pt. 8 oz. (4.7¢).

GINGER ALES

BEST BUYS

The following were considered to give the best value for the money in the order given:

Myer 1890 Pale Dry (Myer Prod., Inc., NYC). 13¢ for 1 pt. 13 oz. (7.2¢). High sugar, medium acid type. Available in NYC and Newark.

Belfast Extra Pale Extra Dry (New Century Beverage Co., San Francisco). 11¢ for 1 pt. 13 oz. (6.1¢). High sugar, low acid type. Available in Central and Northern California.

CONTINUED ON PAGE 176

fruit, pleasure of maturity.

Clicquot Club
GINGER ALE

OVER FIFTY YEARS A FAVORITE

Clicquot Club Sparkling Water as a mixer puts life in any drink—and keeps it there!—with Bonded Carbonation!

The ads say: "Bonded Carbonation," but CU tests showed carbonation to be variable, and placed Cliquot Club way down on the "Acceptable" list.

ACCEPTABLE

(In estimated order of quality)

Myer 1890 Pale Dry (see "Best Buys").
Belfast Extra Pale Extra Dry (see "Best Buys").
Shasta Pale Dry (Shasta Water Co., San Francisco). 15¢ for 1 pt. 13 oz. (8.3¢). Low sugar, medium acid type. Available on Pacific Coast.
Rob Roy Pale Dry (American Stores Co., Philadelphia). 15.5¢ for 1 qt. (7.8¢). Low sugar, medium acid type. Available at American Stores.
C & C Pale Dry (Cantrell & Cochrane, Ltd., Long Island City, N. Y.). 20¢ for 1 pt. 13 oz. (11¢). Medium sugar, medium acid type. Available nationally in limited supply.
Grisdale Pale Dry (Gristede Bros., NYC). 12¢ for 1 pt. High sugar, medium acid type. Available in New York and Connecticut at Gristede Stores.
Old Briargate Pale Extra Dry (Walgreen Co., Long Island City, N. Y.). 20¢ for 1 pt. 12 oz. (11.4¢). High sugar, high acid type. Available nationally at Walgreen Stores.
Kroger's Latonia Club Pale Dry (Kroger Grocery & Baking Co., Cincinnati). 6.5¢ for 1 pt. 8 oz. (4.6¢). High sugar, low acid type. Available in Central and Southern States.
American Dry Pale Dry (American Dry Ginger Ale Co., Boston). 8¢ for 1 qt. (3.8¢). High sugar, high acid type.

Available in Massachusetts, Connecticut and New Hampshire.
Macy's Green Label (R. H. Macy & Co., Inc., NYC). 11¢ for 1 pt. Medium sugar, medium acid type. Available in NYC at Macy's Dep't Store.
Pomeroy Pale Dry (Everbest Food Prod., Inc., Brooklyn, N. Y.). 8¢ for 1 pt. 12 oz. (4.6¢). Medium sugar, medium acid type.
Canada Dry Pale (Canada Dry Ginger Ale, Inc., NYC). 15¢ for 1 pt. 12 oz. (8.6¢). High sugar, medium acid type. Available nationally.
Kelly Dry Extra Dry (Kelly Dry Ginger Ale Co., Long Island City, N. Y.). 20¢ for 1 pt. 13 oz. (11¢). Low sugar, high acid type. Available in New York.
Bohack's Pale Dry (H. C. Bohack Co., Brooklyn, N. Y.). 7¢ for 1 pt. High sugar, medium acid type. Available in Long Island at Bohack Stores.
American Home Extra Dry Pale (National Tea Co., Chicago). 7¢ for 1 pt. 8 oz. (4.6¢). Low sugar, medium acid type. Available in Midwest at National Tea Stores.
Harkavy Pale Dry (Harkavy Beverage Co., NYC). 15¢ for 1 pt. 13 oz. (8.3¢). Medium sugar, medium acid type. Available nationally.
Hoffman Extra Dry Pale Dry (Hoffman Beverage Co., Newark, N. J.). 15¢ for 1 pt. 13 oz. (8.3¢). Low sugar, medium acid type. Available nationally.
Yukon Club Pale Dry (A&P). Samples

purchased in different parts of the country varied in price and in sugar content; all medium acid type. NYC: 9¢ for 1 pt. 13 oz. (5¢); high sugar content. Chicago: 7¢ for 1 pt. 8 oz. (4.9¢); low sugar content. St. Louis: 6¢ for 1 pt. 8 oz. (4¢); medium sugar content. Available at A&P Stores.
Penguin Pale Dry (Grand Union Co., NYC). 9¢ for 1 pt. 13 oz. (5¢). Low sugar, low acid type. Available at Grand Union Stores in New York, New Jersey, Connecticut, Massachusetts and Pennsylvania.
Co-op Pale Dry (National Cooperatives, Inc., Chicago). 9¢ for 1 pt. 12 oz. (4.8¢). Medium sugar, high acid type. Available nationally at Co-op Stores.
Millbrook Club Pale Dry (First National Stores, Inc., Somerville, Mass.). 8¢ for 1 pt. 12 oz. (4.4¢). High sugar, medium acid type. Not uniform in original carbonation and retention. Available in New York and New England at First National Stores.
Cliquot Club (Cliquot Club Co., Millis, Mass.). 12¢ for 12 oz. (16¢). Low sugar, low acid type. Available nationally.

NOT ACCEPTABLE

Schneider's Grand Prize Old Fashion (George Schneider & Co., Brooklyn, N. Y.). 9¢ for 1 pt. 12 oz. (5.1¢). Three of the four bottles bought by CU cracked or broke in testing.

BOTTLE STOPPERS

A good cork, pushed tightly into the bottle neck, is generally as effective as special gadgets for preserving the "fizz" of carbonated beverages. But corks don't last indefinitely.

If you believe in large-size bottles as money-savers and don't want them to go flat, you may find special stoppers useful. Before the war there were excellent stoppers, made mainly of rubber. Now, however, the four types found were mainly metal.

Five random samples of each type were tested on bottles of the same brand of cola drink used in testing

ordinary corks. As a standard after determination of original carbonation, some bottles were re-capped with crown caps. The special closures were applied to other bottles, and all were tested for retained carbonation after six, 24 and 48 hours.

This test, at room temperature, was more rigid than ordinary usage, since most people keep bottles in refrigerators where lower temperature retards loss of carbonation.

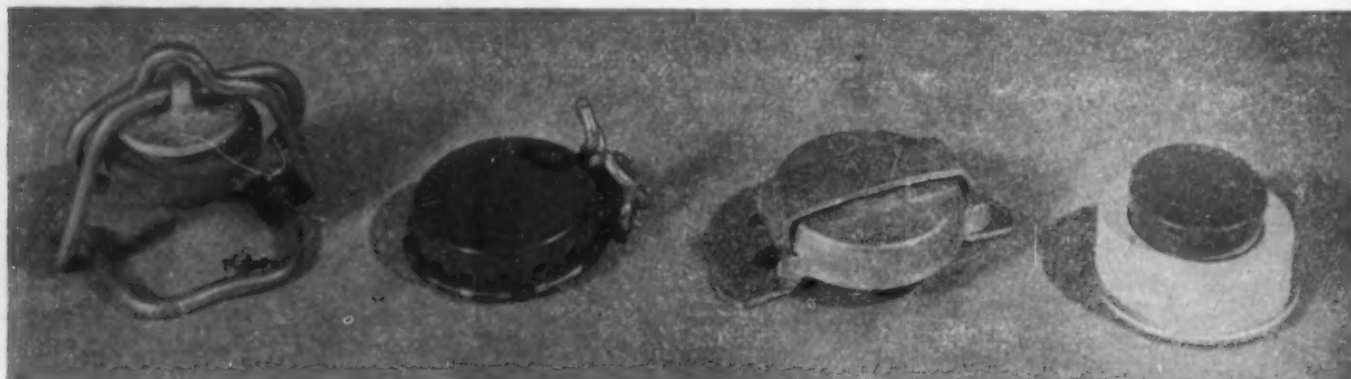
Not all caps of the same brand were found equally effective. Taking this into account, CU's findings showed the following order of decreasing effectiveness:

Eick, 10¢ each. As effective as re-capping with crown caps, even after 48 hours.

Kork-N-Seal (Crown Cork Specialty Corp., Decatur, Ill.). 5¢ for 2 caps. One of the five caps tested was not effective; the other four were equal to crown caps.

Seal Again (Seal-Again Bottle Stopper Co., NYC). 10¢. These were pretty good for six hours, but not very good after 24 and 48 hours.

No name or identification. 5¢ each. One of the five samples tested was ineffective in retaining carbonation for six or 24 hours, and two were ineffective after 48 hours.



Left to right: Eick, Kork-N-Seal, Seal Again, Unidentified (5¢)

Ice Cream Mixes

Though they were judged inferior to commercial ice cream, CU tasters found many were good in flavor and consistency. Rated here are 12 brands of easy-to-prepare vanilla mixes.

A few minutes of mixing with an egg beater plus a few hours' freezing in an automatic refrigerator can produce a quart of good ice cream for 40¢, CU's tests of 12 brands of vanilla ice cream mixes showed. For, though most of CU's 20 tasters preferred commercially-made ice cream, five products of the home refrigerator earned a rating of "Good."

Among the top three were the nationally distributed *Virginia Dare* and *Junket* ice cream mixes. Kraft's *Frizz*, a relatively new and much-advertised product, rated fourth choice. The ease with which *Frizz* can be prepared—no ingredients to be added but water—deserves special note.

TASTE TESTS

A panel of 20 CU staff members acted as tasters in the tests. The ice creams were prepared and frozen according to the directions on the packages; and two samples, identified only by the letters "A" and "B," were served simultaneously to each taster. Tasters were asked to indicate which sample they preferred, and to rate the samples individually on the basis of flavor (good, fair or poor), and consistency (satisfactory or unsatisfactory). They were also asked to give their opinions of each sample as compared with commercial ice cream (better or worse).

Samples were served twice daily—morning and afternoon. Each taster was given every brand at least twice, and in some cases three times. Despite the variable factors, such as weather and degree of hunger, the judgments of the individual tasters showed a remarkable consistency. At final tabulation, 85% of the duplicate and triplicate tests showed results in agreement with the original.

After all the brands had been scored, the four ranking highest in flavor were tested, one at a time, against four brands of commercial ice cream bought in New York City. The tasters were not told that they were sampling commercial ice cream; samples were simply labeled "A" and "B" as before. The result: in both flavor and consistency, preferences

were in almost all cases in favor of the store ice cream.

Of the 12 brands tested, all were powders except *Ten-B-Low* and *Jell-O*, which were concentrated liquids. The ingredients varied but in general they included starch, gums, sugar, flavoring and, in some cases, milk solids, egg, cream and gelatin. There was some variation in the ingredients of two packages of *Junket*: in one, low-fat soya (with U.S. certified color added) was substituted for the skim milk found in the other. But taste tests of the two produced almost identical results.

No brand was found difficult to prepare. All except *Frizz* and *Ten-B-Low* required the addition of milk, light cream or evaporated milk, or combinations of these. About half required addition of sugar, and two called for flavoring. *Jell-O* and *Kool Aid* recipes called either for the use of heavy cream or evaporated milk. Since heavy cream is not available currently to most consumers, evaporated milk was used in the tests.

The ice cream mix situation appears to have changed considerably

since CU last tested these products (see the *Reports*, September 1941). Of the ten brands of vanilla mixes rated at that time, only three were now found on the market. All three were then rated "Fair"; the recent tests indicate that *Junket* and *Jell-O* now deserve a "Good" rating; *Ten-B-Low* has been dropped to the "Poor" category.

With any of the mixes tested, variety can be achieved by adding fruit or flavoring. Such addition would probably increase the palatability of *Frizz*, in which the flavor was only "Fair" as plain vanilla, but which had satisfactory consistency. (As we go to press, tests on ice cream mixes other than vanilla are under way. The results of these will be published in a forthcoming issue of the *Reports*.)

The principal weakness of ice cream made from the mixes is in consistency. Most mixes failed to freeze to the creamy smoothness of commercial ice cream. Some contained ice crystals; other felt thick or "chalky" in the mouth. This is not surprising. Commercial ice cream is kept in constant motion until the last stage of the freezing process. And if you can recall the work involved in running an old-fashioned ice cream freezer, you may be more willing to make allowances for the less perfect results of mixes frozen in the tray of your automatic refrigerator.

To give a price comparison between the ice creams made from the mixes tested and those bought at a



Taste tests of the prepared vanilla ice cream mixes were made by 20 members of CU's staff. Each taster judged brands on flavor, consistency and comparison with commercial ice cream.

store, CU estimated the cost per pint of finished ice cream made from each brand. The following retail prices were used as the basis for calculations: $\frac{1}{2}$ pint light cream, 16¢; 1 quart milk, 15¢; a 13-ounce can of evaporated milk, 10¢; 1 pound of sugar, 7¢.

As compared with commercial bulk ice cream at 40¢ to 45¢ a pint, the estimated cost of the most expensive ice cream made from a mix (*Junket*, 26¢ a pint) was only a little more than half as expensive. Thus, the brands listed as "Good," and having good consistency, might be considered "Best Buys."

Brands are listed below in order of quality, based on taste preference and consistency. Figures in parentheses represent approximate costs per pint of ice cream.

ACCEPTABLE

(In estimated order of quality)

Zip-Freeze (Albulac Co., Chicago). 10¢ a package (20¢). Flavor and consistency good. Powder; required addition of cream and sugar.

Virginia Dare (Virginia Dare Extract Co., Brooklyn). 10¢ a package (21¢). Flavor and consistency good. Powder; required addition of cream and sugar. Available nationally.

Junket Freezing Mix (Chr. Hansen's Lab., Inc., Little Falls, N. Y.). 7¢ a package (26¢). Flavor and consistency good. Powder; required addition of cream. Available nationally.

Frizz (Kraft Cheese Co., Chicago). 33¢ a package (22¢). Flavor fair; consistency good. Powder; required addition of water only. Available nationally.

Jell-O Freezing Mix (General Foods Corp., NYC). 12¢ a package (15¢). Flavor fair; consistency unsatisfactory; icy and soft. Liquid; required addition of evaporated milk. Available nationally.

Kroger's Twinkle Ice Cream Mix (Kroger Grocery & Baking Co., Cincinnati). 5¢ a package (17¢). Flavor good; consistency icy. Powder; required addition of milk, cream and sugar. Available in the Midwest, South and in Pennsylvania at Kroger Stores.

Vertrees' Frosty-Mix (Vertrees Manufacturing Co., Louisville, Ky.). 10¢ a

package (21¢). Flavor fair; consistency unsatisfactory; icy. Powder; required addition of milk and cream. Available in Kentucky and parts of Virginia, West Virginia, Indiana and Ohio.

Londonderry (Londonderry, San Francisco). 15¢ a package (21¢). Flavor fair; consistency unsatisfactory. Powder; required addition of cream and sugar. Available in Eastern, Central and Western States.

NOT ACCEPTABLE

The following had poor flavor and poor consistency:

Old Mill (Old Milling Co., Portland, Ore.). 15¢ a package (20¢). Powder; required addition of cream and sugar.

Kool-Aid Mix (Perkins Prod. Co., Chicago). 4¢ a package (7¢). Powder; required addition of evaporated milk, water and sugar.

Ten-B-Low (Ten-B-Low Co., Columbus, Ohio). 29¢ a jar (16¢). Concentrated liquid; required addition of water and vanilla.

Ripsey's Foamoline (William Ripsey, Cincinnati). 22¢ a package (22¢). Powder; required addition of cream, sugar and vanilla.

Muffins, Biscuits, Hot Breads, Cakes, Pie Crust

You can add hot breads and homemade cakes to your menus even if you are too busy to do much kneading, mixing and measuring. Many brands of the five types of mixes tested by CU—muffin, biscuit, gingerbread, cake and pie crust—were found to give excellent results with a minimum of preparation time. Like the pancake and waffle mixes (see the *Reports*, June 1944), these are made ready for baking by the simple addition of water or milk, and in some cases eggs. And they can be out of the oven by the time the rest of the meal is served.

MUFFIN MIXES

The basic formula for muffin mixes is white or whole wheat flour, vegetable shortening, sugar, baking powder or soda and salt. Variety is achieved by the addition of corn meal, soy flour, rye flour or bran. Artificial flavorings are used by some manufacturers, and dextrose (corn sugar) is sometimes substituted for ordinary cane sugar.

Three of the eight brands of muffin mixes tested by CU contained powdered skim milk and powdered

... these are some of the baked goods you can prepare at home simply by adding water or milk to a ready-made mix, and baking in your oven. Many are good in flavor and baking quality, CU found in testing 24 brands.

egg. These ingredients do not necessarily mean good quality, however. They were used in the brand rated "Not Acceptable" as well as in the one considered best. In most cases when dried milk and egg were omitted in the formula of the flour, directions called for the addition of egg and milk instead of water. The distinctive flavor of the finished product is determined mainly by the type of cereal flour used with the wheat flour of the basic formula.

Muffin mixes were tested for rising quality (affecting the volume of yield), color of crust and crumb, grain, texture, flavor and aroma. Since texture, flavor and aroma are considered the most important, they

were given greatest weight in ratings.

BISCUIT MIXES

All five of the biscuit mixes tested by CU contained flour (bleached, unbleached or cake flour were used), vegetable shortening, salt, baking powder (or soda and calcium phosphate) and some form of sugar. Three brands contained powdered skim milk; for two of these, the instructions gave a choice of adding either water or milk; the third, *Bisquick*, called for milk. *Co-op* Prepared Biscuit Flour, which received the highest rating, was made with enriched, unbleached flour; directions called for the addition of milk, since there was no skim milk in the product.

In testing biscuit mixes, rising qualities and color of crust and crumb were allotted 30% of the total score, with grain, texture and flavor accounting for the remaining 70%.

GINGER BREAD MIXES

Batter quality was judged on the degree of smoothness of the batter and on its color, which should be a deep ginger-red or brown. Baking

results were scored on rising quality and the color, grain, texture and flavor of the finished product.

The four ginger bread mixes were tested for water absorption to determine the amount of water required to make a batter of the proper consistency. Indications given by this test of the yield to be expected from a given amount of flour were borne out by baking results. *Duff's* Ginger Bread Mix, which absorbed the most water, also produced the biggest cake.

The formula for ginger bread mixes is: flour, molasses, sugar or corn syrup, vegetable shortening, baking powder or baking powder and soda, salt, powdered egg, artificial flavoring and spices. Two brands contained powdered skim milk, but test results indicate that its inclusion does not necessarily improve quality; the best mixes omitted this ingredient.

CAKE MIXES

Three types of cake mixes were found by CU's shoppers: two brands of devil's food, two lemon-flavored yellow cakes and a spice cake. All four included vegetable shortening, sugar, powdered egg, powdered skim milk, salt, baking powder (or soda and phosphate) and flavoring in their ingredients. The devil's food types added cocoa, and the spice cake, various spices and cocoa. *Helen's Red-E* Devil Food Mix, which received the highest rating, was made with enriched wheat flour and oat flour. The Spiced Cake Mix of the same brand, considered fairly good, contained some soya flour.

The cake mixes were tested for rising quality, color of crust and crumb, grain, texture, flavor and aroma. The last three, considered together as palatability, were the chief factors in the ratings.

PIE CRUST MIXES

Color, dough quality and flavor were considered in the tests of the two brands of pie crust mixes. Both contained flour, shortening, salt and baking powder. Both were found "Acceptable," but *6-O'Clock* was preferred to *Flako* since it was made with a softer flour and produced a shorter pie dough. *Flako*, though it contained an excess of shortening and was rather greasy, was at the same time not "short" enough because of the stronger flour used.

In using any of these variety

mixes, be sure to follow exactly the directions on the package. Since all the ingredients have been carefully measured, the addition of more or less than the specified amount of liquid will produce unsatisfactory results.

In the following ratings, figures in parentheses represent the cost per pound.

CORN MUFFIN MIXES

ACCEPTABLE

(In estimated order of quality)

Flakorn Corn Muffin Mix (Flako Prod. Corp., Milltown, N. J.). 14¢ for 11¾ oz. (19.1¢). White flour and corn meal. Excellent flavor.

Belmo Corn Muffin Mix (Shedd-Bartush Foods, Inc., Detroit). 9¢ for 8 oz. (18¢). White flour and corn meal. Good flavor. Available in East, Midwest and Southeast.

Helen's Red-E Corn Muffin Mix (Gann Products Co., Oakland, Calif.). 25¢ for 14 oz. (28.6¢). White flour and corn meal. Contained powdered egg and skim milk. Good flavor. Available in California, Oregon and Nevada.

6-O'Clock Corn Muffin Mix (6-O'Clock Co., Morristown, Penna.). 12¢ for 12 oz. (16¢). White flour and corn meal. Good flavor. Available in Middle Atlantic States.

OTHER MUFFIN MIXES

ACCEPTABLE

(In estimated order of quality)

Duff's Hot Muffin Mix (P. Duff & Sons, Inc., Pittsburgh). 23¢ for 14 oz. (26.3¢). Enriched white flour and soy flour. Contained powdered egg and skim milk. Tea biscuit type; excellent flavor. Available nationally.

Helen's Red-E Bran Muffin Mix (Gann Prod. Co.). 17¢ for 12 oz. (22.7¢). Whole wheat flour and bran. Rather sweet, with mild wheat germ flavor. Available in California, Oregon and Nevada.

Golden Wheat-Soy Mix for Muffins (Soy Food Mills, Chicago). 15¢ for 10 oz. (24¢). Unbleached wheat flour and soy flour. Fair flavor, slightly salty. Available in East, South and Midwest.

NOT ACCEPTABLE

Lily White Whole Wheat-Rye Muffin Mix (R. H. Macy & Co., NYC). 29¢ for 12 oz. (38.6¢). Whole wheat and rye flour. Contained powdered egg and skim milk. Tough, heavy and coarse grained.

BISCUIT MIXES

ACCEPTABLE

(In estimated order of quality)

Co-op Prepared Biscuit Flour (National Cooperatives, Inc., Chicago). 24¢ for 2 lb. (12¢). Enriched, unbleached



There's no need for an elaborate baking technique with the commercial ready-mixed products. Any child can follow the simple instructions; the result may rival Mother's pet recipe.

wheat flour. Tea biscuit type; excellent flavor. Available nationally at Co-op Stores.

Fisher's Biskit Mix (Fisher Flouring Mills Co., Seattle). 29¢ for 2½ lb. (11.6¢). Bleached white flour. Contained powdered skim milk. Excellent flavor. Available in Western States.

Bisquick (General Mills, Inc., Minneapolis). 16¢ for 1 lb. 4 oz. (12.8¢). Enriched, bleached flour. Contained skim milk. Excellent flavor. Available nationally.

Globe A1 Biscuit Flour (Globe Mills, Los Angeles). 17¢ for 1 lb. 4 oz. (13.6¢). Bleached wheat flour. Contained powdered skim milk. Tasted of excess baking powder, otherwise good. Available on West Coast.

Helen's Red-E Mix Biscuits (Gann Prod. Co.). 10¢ for 10 oz. (16¢). Cake flour. Somewhat coarse grained. Tea biscuit type; good flavor. Available in California, Oregon and Nevada.

GINGER BREAD MIXES

ACCEPTABLE

(In estimated order of quality)

Duff's Ginger Bread Mix (P. Duff & Sons, Inc.). 20¢ for 14 oz. (22.8¢).

Enriched flour. Excellent in flavor, grain and texture. Greatest yield among brands tested. Available nationally.

6-O'Clock Ginger Bread Mix (6-O'Clock Co.). 21¢ for 14 oz. (24¢). Excellent flavor, but rather cloying. Available in Middle Atlantic States.

Dromedary Ginger Bread Mix (Hills Bros. Co., NYC). 18¢ for 14¼ oz. (20.2¢). Contained powdered skim milk. Fair flavor, but rather cloying. Available nationally.

NOT ACCEPTABLE

X-Pert Ginger Bread Mix (Modern Foods, Inc., Newark, N. J.). 18¢ for 14 oz. (20.6¢). Contained powdered skim milk. Poor rising quality, grain and texture; bitter ginger flavor. Available East of the Mississippi.

CAKE MIXES

ACCEPTABLE

(In estimated order of quality)

Helen's Red-E Devil Food Mix (Gann Prod. Co.). 30¢ for 16 oz. (30¢). Enriched wheat flour and oat flour. Excellent flavor. Available in California, Oregon and Nevada.

X-Pert Devil's Food Mix (Modern Foods, Inc.). 18¢ for 14¼ oz. (19.9¢).

Excellent flavor. Grain rather coarse, but probably normal for this type of cake. Available East of the Mississippi.

Helen's Red-E Yellow Cake Mix (Gann Prod. Co.). 30¢ for 1 lb. (30¢). Wheat, cottonseed and oat flour. Excellent flavor, slightly lemon. Available in California, Oregon and Nevada.

Joy Golden Layer Cake (Cramer Products Co., NYC). 29¢ for 14 oz. (33.1¢). Very good flavor, slightly lemon. Available nationally.

Helen's Red-E Spiced Cake Mix (Gann Prod. Co.). 30¢ for 1 lb. (30¢). Wheat flour and soya flour. Good flavor, nutmeg-mace. Available in California, Oregon and Nevada.

PIE CRUST MIXES

ACCEPTABLE

(In estimated order of quality)

6-O'Clock Pie Crust (6 O'Clock Co.). 12¢ for 8 oz. (24¢). Good flavor; short dough. Available in mid-Atlantic States.

Flako Pie Crust (Flako Products Corp.). 9¢ for 8 oz. (18¢). Rather doughy and not quite short enough, probably due to the strong flour used. Might be satisfactory for bottom crusts in commercial bakeries, since a less short crust makes handling easier.

SUNGLASSES

High price and good quality do not necessarily go hand in hand, optical tests show. Here are test results on 27 brands of sunglasses, along with some expert opinion as to whether or not you need sunglasses.

With sunglasses, as with other consumer goods, price is no guide to quality. CU's tests of 27 brands disclosed that some brands selling for 50¢ or less were optically excellent, while other sunglasses selling for as much as \$5 were seriously defective.

The wearing of sunglasses has grown from a Hollywood fad to a national habit in the past dozen years. No longer the exclusive trademark of movie celebrities or sportsmen, sunglasses have gone to the tropics with American soldiers and into factories where men and women are doing unaccustomed work under intense light.

Although purchases for the armed forces have removed some brands of sunglasses from the civilian market and decreased supplies of others, WPB permits manufacturers a civilian sales quota equal to 90% of their 1942 production.

Though the main purpose of CU's

tests was to tell readers which sunglasses to buy, the fact is that most people don't need sunglasses at all. Persons with normal vision have an automatic adjustment for changes in the intensity of light—the pupils of the eyes, which dilate when the light is dull and close down to pinpoint size in bright light. The constant use of dark glasses tends to increase temporarily the light sensitivity of the eyes, and in some cases it causes strain and headache.

There are, however, some persons who suffer from "photophobia"—a condition in which the eyes are unusually sensitive to bright light—who need the protection of sunglasses whenever they are in bright sunlight. Without fairly dark lenses, such persons suffer acute discomfort and inflammation of the eyes.

And even for normal eyes, colored lenses do help prevent discomfort

when light and reflections are especially brilliant, as at the beach. Dark glasses which are optically good are not likely to harm the eyes; dark glasses—in fact, any glasses—which have serious defects are likely to cause eyestrain if they are worn much.

ROSE-COLORED GLASSES

On the question of color, the experts do not agree. Most of them say the color of the lenses doesn't matter; any tint will cut out enough glare to give as much protection as is necessary. Some experts hold out for gray lenses, which cut off more-or-less equal amounts along the color spectrum, and give an approximately normal color relationship. Others consider a drab green color best. The general consensus seems to be that any color comfortable to your eyes is quite safe for them. For the majority of sunglass wearers, this would eliminate glasses that are too brightly rose-colored, as well as the more brilliant yellows, blues and greens.

Assuming that you do wear sunglasses, more or less, how nearly perfect need they be? The answer depends upon the use for which the glasses are intended. If your use of dark glasses is confined to an occasional hour when you're sunbathing

on the beach, with your eyes closed most of the time anyway, you obviously won't need the perfection important in glasses to be used for reading or driving a car. For an occasional sunbath, the cheapest sunglasses, even if they have defects, won't do any harm. But if you're going to use them for reading, driving, playing tennis or other occupations where clear and concentrated vision is important, the glasses should be reasonably free from defects.

In any case, you needn't pay high prices to "keep your eyes in the safety zone," as *Cool-Ray's* ads suggest; good curved lenses, ground and polished, set in sturdy frames, are available for less than a dollar a pair (*Columbia*, 98¢). For 39¢, *Columbia* glasses with flat lenses and somewhat less sturdy frames—second in lens quality among the 27 brands tested—can be bought in five-and-ten's, drug stores and department stores all over the United States.

LENS QUALITY

Opinion differs as to whether flat lenses can be as satisfactory as curved ones. Optically they can be equally good, but some persons seem to be annoyed by reflections from behind, which may be cast from the surfaces of flat lenses. Furthermore, curved lenses can be set in frames more closely fitted to the face, cutting out more of the light which would enter from the side.

Whether they are flat or curved, the lenses of sunglasses are either ground and polished, or blown, drawn or dropped. Ground and polished lenses for general use are made from a single piece of glass, but they may be laminated to provide safety glass for special uses.

Commercial standards, set by the National Bureau of Standards, have been accepted by the industry to regulate the lens quality of sunglasses. But adherence to these standards is voluntary, and the large number of substandard lenses found by CU in its tests is eloquent testimony to the fact that without mandatory standards, the consumer can have no true assurance of high quality.

If you normally wear glasses to correct vision, you can solve your sunglass problem in either of two ways. Expensive, but most satisfactory, particularly if you wear sunglasses a good deal, is to have sunglasses made to your regular pre-

scription. *Calobar* lenses are still available by prescription, though supplies of the non-prescription lenses of this brand have been taken over by the armed forces.

Less expensive, but also less satisfactory if the glasses are much worn, are "clip-ons" which fit over regular lenses. The extra weight may make them uncomfortable. If you get clip-ons, see that the springs at the center are strong and firmly attached, and that they fit snugly over your glasses. See, too, that there is no contact between the two lens surfaces, otherwise scratching may result.

SPECIAL LENSES

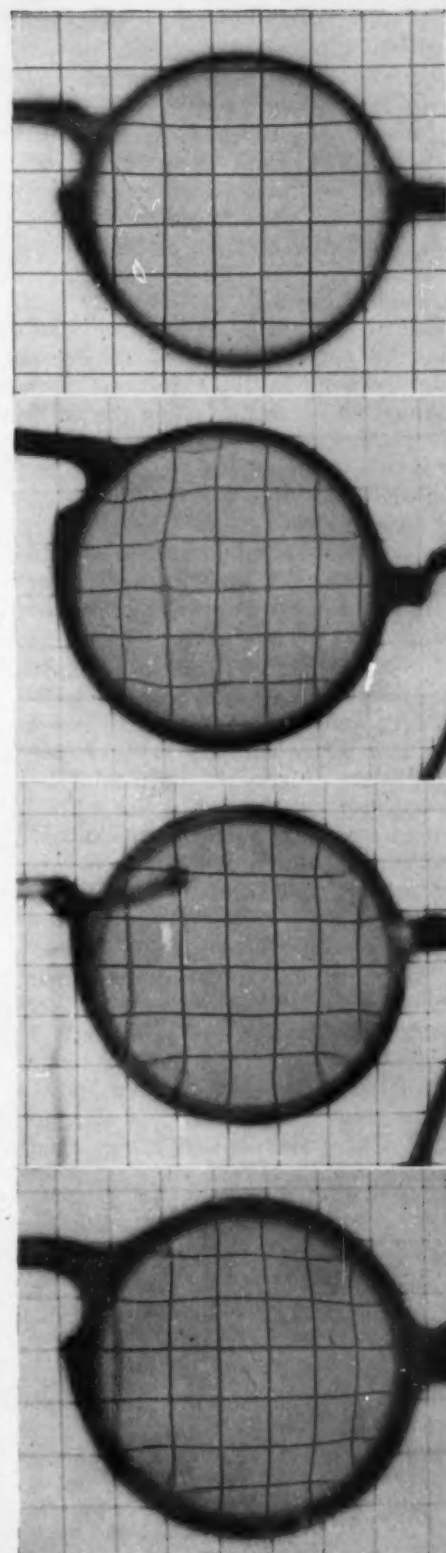
"Polaroid lenses," say the ads, "are made by a unique principle. A combination of polarizing materials and laminated lenses sorts light rays . . . admits seeing rays . . . blocks reflected glare and ultra-violet (sunburn) rays." While the principle of polarization would be very useful in sunglasses to be used for certain purposes (fishing, sunbathing on dazzling sand, for example), unfortunately it cannot compensate for the optical defects of *Polaroids*. As in CU's 1938 tests, *Polaroids* were found to be of poor quality optically, and were rated "Not Acceptable."

You can safely disregard such claims as those made for *Cool-Ray*, that the lenses are "of scientifically compounded glass that absorbs ultra-violet and infra-red rays, and excessive light. . . . These rays pass right through some sunglasses." The fact is that any ordinary glass filters out most of the ultra-violet, and any additional protection which *Cool-Ray's* may give is unnecessary. Not that it will do any harm in the case of *Cool-Ray's*, which tests showed to be optically excellent.

Standards for ground and polished lenses are much more stringent than those for dropped lenses. CU's ratings of all glasses were based on the standards for ground and polished lenses, with tests and examination for cylindrical power (astigmatism), lens power, prism power and surface imperfections such as scratches, striae, waves and ripples. Ground and polished lenses of good quality were found in some brands at prices as low as those for inferior dropped lenses.

CHECKING FOR DEFECTS

No matter what brand of glasses



Optical defects in lenses can be seen if they are held above a piece of ruled paper. The lens at the top is satisfactory. The lens below shows prism power, as seen from the displacement of ruled lines, as well as other defects. The next lens has lens power, shown by the decreased size of the ruled boxes seen through it; and the bottom lens gives an astigmatic effect.

you select—even if you get those CU rates “Optically Excellent”—you should examine them carefully before you buy, since there is some variability among different lenses of the same brand. First examine the surfaces to see that they are perfectly smooth and free from surface defects such as scratches or chips. Look particularly for chipped edges, for though these may not interfere with vision, they can be the start of cracks in the lens. The lenses should be tightly held in their frames; there should be no motion when the frame is grasped in one hand, the lens between the fingers of the other, and moved back and forth. In well-constructed glasses, the edges of the lenses are beveled to assure snug fit in the frames, though this is something you can't determine by inspection.

Now check the lenses for unevenness by holding them at arm's length and looking through them at some brightly illuminated object with a pattern of straight horizontal and vertical lines (the outlines of a building across the street, for example, but not through a glass window). If any of the edges look wavy, reject the glasses, for the lenses contain waves or ripples.

Keep looking at the same object, holding the lens at arm's length, perpendicular to the line of vision. If the object appears smaller or larger than it should, excessive lens power is present; if the lines at which you are looking are not continuous inside and outside the lens—that is, if the field of vision is displaced—prism power is present; astigmatism will cause apparent lengthening or shortening of the object in one direction. Any such distortions should cause you to reject the glasses.

To double-check, move the glasses up and down and sidewise in the plane of the lens, while holding them in the same position. The lines should remain reasonably steady, with no “jumping.”

FRAMES

The frames of the higher-priced sunglasses are constructed in the same way as regular eyeglass frames, with metal hinges and metal temple interiors. (These, incidentally, are the only places where metal may be used in sunglasses according to the WPB limitation order.) Cheaper glasses are made of celluloid, usually with no re-

inforcement in the temples, and with the hinge portions simply a continuation of the goggle and temple portion, held together with a metal or a plastic pin. The celluloid frames are lacking in sturdiness, and they have a tendency to warp and crack when exposed to heat and water. Nor can celluloid be adjusted to fit as can the plastic frames. However, the inexpensive celluloid-frame glasses can be quite satisfactory for occasional use.

Since there is considerable variation from one frame to another of the same brand, try on several pairs until you find one that fits comfortably. The temple pieces should be fairly snug, though not tight; the frame should be so shaped at the nose that it neither pinches nor tends to slip down. If you buy glasses with good frames from an optical store, the optician should be asked to make any necessary adjustment in the frames.

One type of frame which offers extra protection has temple-pieces widened at the front, to filter out light from the sides. Some people find them satisfactory; others experience a “confined” feeling, and compare this construction with the blinders used to keep the attention of the horses on the road ahead.

RATINGS

For the ratings which follow, tests were made on at least two lenses of each brand. In some cases the lenses were from the same pair of glasses; in others, the lenses came from different pairs. With the low-priced glasses (less than \$1) which received an “excellent” rating, check tests were made on two additional pairs

of glasses, making a total of four lenses tested on each. The rating in each case is based on the poorest of the lenses tested in a given brand.

ACCEPTABLE

(In estimated order of quality of the lenses, but note comments)

Sun Veil (American Optical Co., Southbridge, Mass.). \$1.50. Gray, curved lenses. Plastic frame with metal hinges and metal temple interiors. Optically excellent. Available nationally.

Columbia Goggles (Columbia Protektosite, Carlstadt, N. J.). 39¢. Gray, flat lenses. Celluloid frame; celluloid hinges held with metal pins. Optically excellent. Available nationally.

Calobar (American Optical Co.). This brand name is for the lens only; lenses may be inserted into any desired frame, \$5 for two lenses without optical power; prices correspondingly higher for Calobar lenses ground to prescription. Green, curved lenses. Optically excellent. Available nationally, but at present by prescription only except for some old stocks. Regular supplies have been taken over by the armed forces.

Cool-Ray (American Optical Co.). \$3.49. Green, curved lenses. Plastic frame with metal hinges and metal temple interiors. Optically excellent. Available nationally, but in limited supply.

Macy's (R. H. Macy & Co., NYC). 69¢. Gray, flat lenses. Blinker-type ear pieces made of celluloid. Celluloid frame; celluloid hinges held with metal pins. Optically excellent. Available at Macy's Dep't Store, NYC.

Optiks (Lapin Prod., Inc., Newark, N. J.). 50¢. Green, flat lenses. Some made with blinker-type frames, similar to Macy's, above, except with celluloid instead of metal pins at the hinges; others with regular celluloid frames with celluloid hinges. Optically excellent. Available nationally.

Sun Veil, Jr. (American Optical Co.). \$1.50. Gray, curved lenses. Plastic frame with metal hinges and metal temple interiors. Frame of pair tested had nose-piece and hinges disproportionately large for frame. Optically excellent. Available nationally.

Cool Vue. 25¢. Green, flat lenses. Celluloid frame with celluloid hinges held with metal pins. Optically excellent. Available nationally at Woolworth 5&10 Stores.

Cool-Ray (American Optical Co.). \$1.98. Green, curved lenses. Plastic frame with metal hinges and metal temple interiors. Optically good. Available nationally.

Full Vue (National Optical Plan, NYC). \$4.50. Green, curved lenses. Plastic frame with metal hinges and metal temple interiors. Optically good. Available nationally.



Columbia Goggles (Columbia Protekto-site). 98¢. Green, curved lenses. Celluloid frames with celluloid hinges held by metal pins; metal temple interiors. Optically satisfactory. Available nationally.

MSA Industrial Goggles (Mine Safety Appliance Co., Pittsburgh). \$8.95. Shatterproof green, flat lenses. Metal frames, sturdily built with double nose-piece. Metal temples with plastic sheaths. Optically satisfactory. Available nationally.

Carl Halle. \$5. Green, curved lenses. Plastic frame with metal hinges and metal temple interiors. Optically satisfactory. Bought at Wanamaker's Dep't Store, NYC.

NOT ACCEPTABLE

The following failed to meet the Commercial Standards on one or more counts:

Polaroid, Jr. (American Optical Co.). \$1.95. Green, flat lenses with special properties (see text). Lenses contained ripples.

Columbia Goggles (Columbia Protekto-site). \$1.69. Green, curved lenses. Lenses contained irregularities.

Kilglare (Distrib. by H. L. Green and F&W Grand Stores). 25¢. Blue, curved lenses. Lenses contained defects.

Flight (CaseCraft, Newark, N. J.). \$5. Green, curved lenses. Lenses contained ripples and other imperfections. Questionable whether they were ground and polished.

Solarex Cat. No. — 9502 (Montgomery

Ward). 45¢ plus postage. Blue, curved lenses. Lenses contained ripples.

Solarex (Bachmann Bros., Inc., Philadelphia). 59¢. Blue, curved lenses. Lenses contained waves and ripples.

Sun Shade (Foster-Grant Co., Leominster, Mass.). 25¢. Gray, curved lenses. Lenses contained bad defects.

Sun Veil (American Optical Co.). \$2.49. Gray, curved lenses. Lenses had prism power greater than permitted by specifications.

Eureka (Simpson Walther). \$2. Gray, curved lenses. Lenses had prism power greater than that permitted by specifications.

Liberty Face Full (Liberty Optical Mfg. Co., Newark, N. J.). \$3.95. Lenses had prism power greater than that permitted by specifications.

Upswing Cat. No.—9590 (Montgomery Ward). 21¢ plus postage. Gray, curved lenses. Lenses had lens power greater than that permitted by specifications; had defects.

Unbranded (Kress 5 & 10¢ Store). 20¢. Gray, curved lenses, labeled "Crookes." Had lens power greater than permitted by specifications; distortions throughout lenses.

Unbranded (Nichol 5 & 10¢ Store). 25¢. Gray, curved lenses. Had lens power greater than permitted by specifications; distortions and striae in lenses.

Columbia Goggles (Columbia Protekto-site). 29¢. Gray, curved lenses. Lenses gave astigmatic distortion greater than permitted by specifications; had surface defects.

eration for many mothers who have dawdling troubles on the journeys between home and store.

Before you buy a shopping wagon, examine it carefully to see that it has sturdy wheels which turn easily on a well-mounted axle. The carrying bag should be large, and made of material sturdy enough to withstand friction against the wooden frame. The bag should be so mounted that it can be packed easily, without throwing the cart off balance.

SHOPPING BAGS

If you have no victory wagon, you'll need a spacious, strong shopping bag to carry your bundles. And even if you have a wagon, you'll probably need some kind of shopping bag to take department-store shopping, or for other expeditions that require use of a train or a car. The kind you buy will depend on the features your particular kind of shopping demands.

Here CU presents a general survey of the market.

MATERIAL

Cloth bags made of sturdy materials are most generally satisfactory. Look for a closely-woven canvas, sailcloth or twill, heavy enough to withstand pressure from heavy weights and sharp corners. A closely-woven fabric has the additional advantage that it is water-resistant, and can keep the bag's contents from becoming water-soaked on rainy days.

Bags made of cotton cord or fishnet are usually very strong, and the elasticity of the net construction enables the bag to accommodate large bundles of awkward shapes. Since this same elasticity means that the bag compresses into smaller size when your bundles are smaller, you won't have a few packages rattling around in an empty space. Furthermore, a string bag is light in weight and can be folded into a very small space, so that you can conveniently carry it to work for shopping on the way home. On the other hand, the loose weave gives the bag very little body, so that when you place the partially-filled bag down, the sides collapse and may give you trouble. And on rainy days, your bundles get no protection from the weather.

"String bags" made of paper strips, tightly twisted, are generally not satisfactory. The material may be strong enough on dry days, but it tends to disintegrate when wet. Be-

When You Go Shopping

The selection of a strong, well-made shopping bag can ease your shopping problem in these days of paper bag shortages

With the magic words "send it" no longer fashionable and with the serious shortage of ordinary paper bags, the shopping bag has been elevated from an accessory of occasional usefulness to an everyday essential. And as such, it can be either a great nuisance or a real shopping ally.

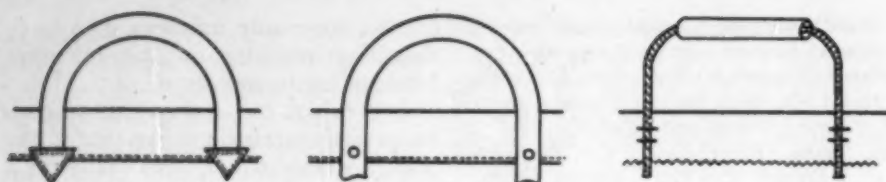
Shopping bags of all types and all prices are to be found on the market, from paper bags with handles, costing 2¢, to wheeled wagons costing several dollars.

"VICTORY WAGONS"

Shopping wagons are new in their present form, though housewives have utilized their principle ever since they started borrowing junior's

wagon to bring home the family groceries, or displaced baby in the go-cart with the week's household supplies. As a matter of fact such makeshifts, if you have them, are at least as satisfactory as the two-wheeled "Victory wagons."

But if you have no other wheeled carrier at your disposal, and if your shopping involves long stretches of walking with heavy bundles, with little or no stair-climbing, a sturdy shopping wagon may answer your problems. Incidentally, the young child who "helps" with the marketing will prove a much more eager assistant, since the shopping wagon combines the attributes of a carry-all and a push toy. This is no slight consid-



The way in which handles are attached is important to the durability of the bag. Left to right, in order of desirability, leather reinforcement; rivet reinforcement; attachment with metal staples.

sides, the construction of such bags is seldom satisfactory.

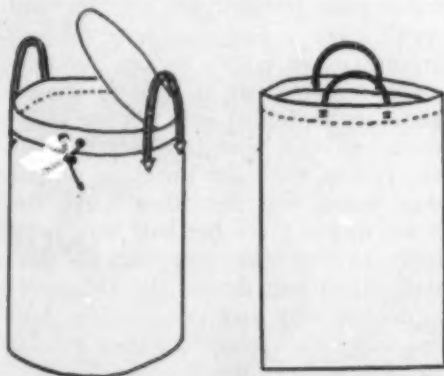
Some bags which at first glance look like grass matting are actually made either of paper or of a combination of paper and cotton. These are not recommended, since the material tends to pull out at the seams, aside from tending to "melt" in rainy weather.

Flexible straw bags—many are imported from Mexico—are so varied in material and construction that no general recommendation regarding them can be made. In general the material is strong, but construction details are sometimes so poor as to make the bags practically worthless.

Paper shopping bags, CU considers, are in the emergency class. Even heavy paper is not strong enough to withstand the wear and tear a shopping bag gets, and many a housewife has had to collect rolling oranges and other bundles from the sidewalk when her paper bag unexpectedly gave way half-way home. If you do have to use a paper bag, it's good insurance to use two, one inside the other, for extra strength.

CONSTRUCTION

A bag is no stronger than its weakest point—usually the point of attachment of the handle to the bag.



The circular bag at left is sturdy, and provided with a flap cover and a drawstring. Less satisfactory is the long, flat type of bag, which tips over easily.

The best kind of construction for handles of fabric bags is one in which the handles are extended down the sides and across the bottom, so that the two handles are, in effect, joined (see illustration). The handle extensions, firmly stitched to the body of the bag, act also as reinforcements for the bag's body. This type of attachment is, unfortunately, seldom found.

Another strong construction uses three-cornered leather patches to hold down the handle ends. In this type, it is essential that the leather be firmly stitched through both handle and bag. Handles of some canvas bags are held in place with rivets. While these do keep the handles from pulling off, they do not prevent tearing of the body of the bag under great strain.

Look for handles broad enough to keep them from cutting into the hands with heavy loads. This is a fault particularly common with many paper shopping bags. On the better ones, there are cardboard handle-guards which help considerably.

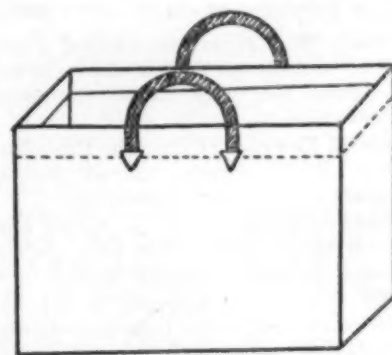
Make sure that the seams of a cloth bag are well sewn, with close, even stitches and heavy thread. Two rows of stitching is best. There should be enough seam allowance to prevent slippage of the material at the seams. Bound edges are satisfactory provided the binding is carefully applied so that adequate seams remain at all points.

High capacity and the ability of a bag to stand up without support when loaded can be achieved together. Bags made of two squares, joined on three sides, with handles on the fourth, are satisfactory in neither respect. The bags can be improved by having a generous strip of material between the sides; or the bag can be made cylindrical, with a circular bottom. One practical model of the latter type, selling for less than \$1, was made of canvas, with a draw-string in the top hem. Thus, the drawn-together top would protect the contents

in rainy weather. For additional protection when the bag was filled to capacity, there was a circular piece attached to the top hem just below a handle, to be used as a "lid."

SHAPE

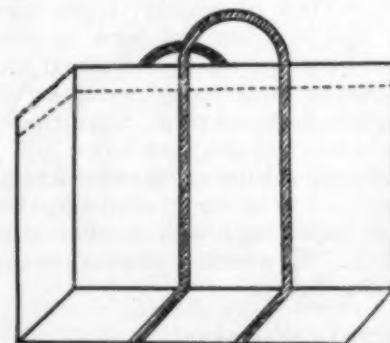
Among the flat bags with side inserts, two shapes are popular: deep and narrow or shallow and wide. Which is better seems to be largely a matter of individual preference. But before you select a deep, narrow bag, make sure that it isn't so deep that you'll have trouble keeping the bag from dragging on the ground when it is loaded. Remember, when you make this test, that a heavy load tends



A wide bag, square at the base, is easy to handle and isn't likely to tip over when you set it down.

to pull the shoulder—and the hand doing the carrying—down.

One advantage of a broad and not-so-deep bag is that there is less tendency for things at the bottom to be crushed by subsequent purchases, placed on top. On the other hand, if you have to carry your bundles through dense crowds, you're likely to get less jostling with a narrower bag.



Something to look for is the handle construction shown above, with handles made from a single piece of material, reinforcing the bag.

CANNED CORN

Excellent quality is available in all types of canned corn, but not all high-priced and well-known brands are good buys, tests of 111 brands show

The word "corn" applies literally to the seeds of any of the cereal grasses used for food; specifically, it is applied to the principal grain crop of any country. Webster's dictionary tells us that in England, for example, "corn" is the name used for wheat; in Scotland and Ireland, "corn" means oats; whereas in the United States it is applied to Indian corn or maize—the grain which Columbus found growing here and which has remained one of this country's largest crops.

One-tenth of our farm land is devoted to raising corn (U. S. type), and modern man has found an ever-increasing number of uses for it, not only as a food for human beings and cattle, but as a raw material for the manufacture of such products as alcohol, starch and industrial chemicals.

The popularity of corn as a food is doubtless due to the fact that it is not only plentiful and cheap, but tasty and satisfying as well. The yellow and white sweet varieties grown for marketing as corn-on-the-cob and for canning are rich sources of carbohydrate, protein and fat. They both contain some B vitamins; and yellow corn, more widely used for canning, supplies considerable amounts of vitamin A.

METHODS OF PACKING

Corn is canned in three styles: *creamed*, *brine packed whole kernel* and *vacuum-packed whole kernel*. For good quality canned corn, the ears should be picked at the "milk stage" before the grains have become tough and starchy. After the ears have been husked, silked and washed they are ready to be cut; and it is the manner of cutting which determines whether whole kernel or cream style is to result.

For cream style corn, only part of the kernel is cut from the cob, and the remainder is scraped off with blunt knives. Kernels and scrapings are mixed together with salt and sugar, and water is added in varying amounts depending upon the consistency desired.

Starch is sometimes added to prevent separation of water and to ensure smoothness. A creamy, heavy consistency is best. A stiff mixture indicates either that the corn is old and starchy or that too much starch was added; if creamed corn is thin, too much water was used.

For both types of whole kernel packs, the corn is cut as close to the cob as possible. Then it is either packed in a brine of water, salt and sugar, or vacuum-sealed in cans without any liquid.

All corn is packed in enamel-lined cans or in glass jars, for corn in an ordinary, unlined can develops an unpleasant, dark-gray color with formation of a deposit on the interior of the can. If corn is not properly processed and sterilized it may develop a distinctly sour, off-flavor called "flat sour," although the cans in which it is packed will not bulge or swell. Of the 348 cans tested, eight were found to be flat sour.

RATINGS

Rating on the basis of color, degree of maturity, tenderness, absence of defects, cut and flavor, government graders examined for CU two to four cans each (in most cases three or four) of 40 brands of cream style yellow and 19 brands of cream style white corn; 45 brands of whole kernel yellow and seven of whole kernel white corn.

In the following ratings, vacuum-packed and brine-packed whole kernel corn are listed together. Brands appear in the order of decreasing quality within each grade, and price is for a No. 2 (1 lb., 4 oz.) can unless otherwise noted. (A 12-oz. vacuum-packed can of whole kernel corn contains about two ounces less corn than a No. 2 can, water packed.)

CREAM STYLE YELLOW CORN

BEST BUYS

Finast (First National Stores, Somerville, Mass.). 13¢. Very tender. Excellent flavor and consistency. Grade A.

Available in New England and New York State at First National Stores.
Snider's Lily of the Valley (Snider Packing Corp., Rochester, N. Y.). 13¢. Very tender. Excellent flavor and consistency. Grade A. Available nationally.

Grisdale (Gristede Bros., NYC). 14¢. Very tender. Excellent flavor and consistency. Available in NYC and Connecticut at Gristede Stores.

Ecco U. S. Grade A Fancy (Economy Grocery stores, Boston). 13¢. Very tender. Excellent flavor and consistency. Grade A. Available in Massachusetts and Connecticut at Ecco Stores and Stop & Shop Supermarkets.

Country Home (Sutter Canfood Co., San Francisco). 13¢. Very tender. Excellent flavor and consistency. Grade A. Available West of the Missouri River; also in Washington, D.C. and NYC.

ACCEPTABLE

GRADE A

Unless otherwise stated the following were very tender, with excellent flavor and consistency:

Finast (see "Best Buys").

S & W (S & W Fine Foods, Inc., San Francisco). 18¢. Available nationally.

Grisdale (see "Best Buys").

Co-op Grade A. (National Co-operatives, Chicago). 15¢. Available nationally at Co-op Stores.

Baxter's Finest U.S. Grade A Fancy. (H. C. Baxter & Bros., Brunswick, Me.). 17¢. Available at grocery stores in New England and in NYC at Macy's, Abraham & Straus, Loeser's, Altman's and Gimbel's Dept. Stores.
Snider's Lily of the Valley (see "Best Buys").

Ecco U.S. Grade A Fancy (see "Best Buys").

Country Home (see "Best Buys").

Libby's (Libby, McNeill & Libby, Chicago). 16¢. Available nationally.

A & P Grade A (A & P, NYC). 13¢. Available nationally at A & P Stores.

Royal Guest (Independent Grocers' Alliance Distributing Co., Chicago). 15¢. Tender. Good flavor. Available nationally at IGA Stores.

GRADE B

Unless otherwise noted, the following were tender, with good flavor and excellent consistency:

Red & White (Red & White Corp., Chicago). 15¢. Available in New England, the Midwest and Rocky Mountain area at Red & White Stores.

Blue & White (Red & White Corp.). 13¢. Available in New England, the Midwest and Rocky Mountain area at Red & White Stores.

Yacht Club (Reid, Murdoch & Co., Chi-

cago). 16¢. Available nationally.

H. G. Prince & Co.'s Finest (H. G. Prince & Co., Oakland, Calif.). 14¢.

Co-op Grade B (National Co-operatives, Inc.). 14¢. Tenderness and flavor variable. Available nationally at Co-op Stores.

American Home (National Tea Co., Chicago). 13¢. One of four cans tested was flat sour. Available nationally at National Tea Stores.

Trupak (Haas Bros., San Francisco). 17¢. Available on West Coast.

Ferndell (Sprague, Warner & Co., Chicago). 23¢. Available nationally.

Premier (Francis H. Leggett & Co., NYC). 16¢. Flavor and consistency variable. Available East of the Mississippi, and in Texas.

Freshpak (Grand Union Co., NYC). 14¢. Available in N.Y., N.J., Conn., Penna., Mass. and Vt. at Grand Union Stores.

Bohack's Best (H. C. Bohack, Inc., Brooklyn, N. Y.). 13¢. Tenderness and flavor variable. Available in Long Island and Brooklyn at Bohack Stores.

Highway (Regent Canfood Co., San Francisco). 11¢. Tenderness and flavor variable. Available in N.Y.; N.J.; Washington, D. C.; Richmond, Va. and throughout Western States at Safeway Stores.

Cokato (Cokato Canning Co., Cokato, Minn.). 15¢. Fairly tender, fairly good flavor. Available nationally.

Friel's Grade A Fancy (S. E. W. Friel, Queenstown, Md.). 15¢. Tenderness, flavor and consistency variable. One code was Grade A; the other tested Grade B. Available East of the Mississippi and in California.

Kroger's Avondale Quality (Kroger Grocery & Baking Co., Cincinnati). 11¢. Fairly tender. Available nationally at Kroger Stores.

Dellford (Middendorf & Rohrs, NYC). 16¢. Tenderness and flavor variable. Available in NYC.

Hart (W. R. Roach Co., Grand Rapids, Mich.). 15¢. Flavor and tenderness variable.

Gardenside (Table Products Co., Oakland, Calif.). 12¢. Tenderness and flavor variable. Available in N. Y.; N. J.; Washington, D. C.; Richmond, Va. and throughout Western States at Safeway Stores.

Del Maiz (Minnesota Valley Canning Co., Le Sueur, Minn.). 15¢. Tenderness and flavor variable. Available nationally.

Dodge (Haas Bros.). 18¢. Available on West Coast.

Co-op Grade C (National Co-operatives, Inc.). 13¢. Of four different codes, one was Grade C with respect to tenderness, flavor and consistency; the other three codes were tender with good flavor and excellent consistency. Available nationally at Co-op Stores.

Kroger's Country Club Quality (Kroger Grocery & Baking Co.). 13¢. Fairly

tender, fairly good flavor, consistency variable. Available nationally at Kroger Stores.

GRADE C

Unless otherwise noted, the following were fairly tender with fair flavor:

Stokely's Finest (Stokely Bros., Indianapolis). 19¢. Tenderness, flavor and consistency variable. Available nationally.

Royal Scarlet (R. C. Williams & Co., NYC). 17¢. Consistency variable. Available nationally.

Bagley Brand (Onalaska Pickle & Canning Co., Onalaska, Wisc.). 15¢. Flavor and consistency variable. Available in Midwest and Southern States.

Rialto Grade C (Grand Union Co.). 11¢. Consistency good. Available in N. Y., N. J., Conn., Penna., Mass. and Vt. at Grand Union Stores.

NOT ACCEPTABLE

Sweet Life (Sweet Life Food Corp., Brooklyn, N. Y.). 15¢. Tenderness, flavor and consistency variable. One can of each code was flat sour.

Scott Co. (Morgan Packing Co., Austin, Ind.). 12¢. Of two cans tested, one was flat sour.

Iona (A & P). 13¢. Two cans of one code were flat sour.

WHITE CORN

BEST BUYS

Co-op Grade C (National Co-operatives, Inc.). 11¢. Of four different codes tested, three were very tender with excellent flavor and consistency; the fourth was fairly tender with fair flavor. Labeled Grade C, but tested Grade A. Available nationally at Co-op Stores.

Grisdale (Gristede Bros.). 14¢. Very tender. Excellent flavor and consistency. Grade A. Available in NYC and Connecticut at Gristede Stores.

Kroger's Avondale Quality (Kroger Grocery & Baking Co.). 11¢. Grade A. Available nationally at Kroger Stores.

ACCEPTABLE

GRADE A

Unless otherwise noted, the following were very tender, with excellent flavor and consistency:

Grisdale (see "Best Buys").

Monarch (Reid, Murdoch & Co.). 18¢. Available nationally.

S and W (S & W Fine Foods, Inc.). 17¢. Available nationally. One of three cans tested was flat sour.

Co-op Grade C (see "Best Buys").

Kroger's Avondale Quality (see "Best Buys").

Del Monte (California Packing Corp., San Francisco). 14¢. Available nationally.

GRADE B

Unless otherwise noted, the following were tender, with good flavor and excellent consistency:

Bohack's Best (H. C. Bohack, Inc.). 13¢. Very tender. Excellent flavor. Available in Long Island and Brooklyn at Bohack Stores.

Country Home Grade A Fancy (Regent Canfood Co.). 12¢. Available West of the Missouri River; also in Washington, D. C. and NYC.

IGA (Independent Grocers' Alliance Distributing Co.). 15¢. Available nationally at IGA Stores.

Kroger's Country Club Quality (Kroger Grocery & Baking Co.). 12¢. Available nationally at Kroger Stores.

Finast Fancy (First National Stores). 13¢. Available in New England at First National Stores.

Trupak (Haas Bros.). 17¢. Codes not uniform: one code very tender with excellent flavor and consistency; other code fairly tender with good flavor and excellent consistency. Available on West Coast.

Iona Grade C (A & P). 11¢. Available nationally at A & P Stores. Labeled Grade C but tested Grade B.

American Home (National Tea Co.). 13¢. Consistency variable. Available nationally at National Tea Stores.

Co-op Grade B (National Co-operatives). 13½¢. Tenderness, flavor and consistency variable from fair to excellent. Available nationally at Co-op Stores.

Dodge (Haas Bros.). 17¢. Available on West Coast.

A&P Grade A (A&P Tea Co.). 13¢. Flavor and tenderness variable from fair to excellent; consistency good. Available nationally at Co-op Stores. Labeled Grade A but tested Grade B.

Ferndell (Sprague, Warner & Co.). 25¢. Fair flavor. Consistency variable. Available nationally.

WHOLE KERNEL STYLE YELLOW CORN

BEST BUYS

A & P (A&P). 13¢. Very tender. Excellent flavor. Grade A. Available nationally at A&P Stores.

Kroger's Country Club Quality (Kroger Grocery & Baking Co.). 13¢. Very tender. Excellent flavor. Grade B. Available nationally at Kroger Stores.

Country Home (Table Products Co. and Sutter Canfood Co.). 14¢. Grade B. Tender. Excellent flavor. Available West of the Missouri River; also in Washington, D. C. and NYC.

ACCEPTABLE

GRADE A

Unless otherwise stated, the following were very tender with excellent flavor:

- Tendersweet** (Iowa Canning Co., Vinton, Iowa). 17¢. Available West of the Mississippi.
- Krasdale** (Krasdale Foods, Inc., NYC). 10¢ for 8-oz. can. Available in N. Y., N. J., Penna., Conn., Mass., Rhode Island and Maine.
- Del Monte Vacuum Packed** (California Packing Corp.). 15¢ for 12-oz. can. Available nationally.
- Butter Kernel Corn** (Minnesota Consolidated Canneries, Inc., Minneapolis). 16¢. Available nationally except in Southeast.
- Red & White** (Red & White Corp.). 16¢. Available in New England, the Midwest and the Rocky Mountain area at Red & White Stores.
- Trupak** (Haas Bros.). 18¢. Available on the West Coast.
- A & P** (see "Best Buys").
- Royal Scarlet** (R. C. Williams & Co.). 17¢. Variable. Available nationally.
- Hart** (W. R. Roach & Co.). 15¢. Available at Roulston Chain Stores.
- Sweet Life** (Sweet Life Food Corp.). 16¢. Available in N. Y.; Springfield, Mass.; Pittsburgh and Detroit.
- Co-op U.S. Grade A Fancy** (Consumers Cooperative Association, North Kansas City, Mo.). 17¢. Available nationally at Co-op Stores.

GRADE B

Unless otherwise stated, the following were tender with good flavor:

- Country Home** (see "Best Buys").
- Kroger's Country Club Quality** (see "Best Buys").
- Playfair** (Fox Valley Canning Co., Hortonville, Wisc.). 15¢.
- Niblets Vacuum Packed** (Minnesota Valley Canning Co.). 13¢ for 12-oz. can. Available nationally.
- Libby's** (Libby, McNeill & Libby). 15¢. Available nationally.
- Finast** (First National Stores). 14¢. Available in New England and New York State at First National Stores.
- Ecco Fancy** (Economy Grocery Stores). 13¢. Of three tested, two were very tender with excellent flavor; the third was fairly tender with good flavor. Available in Massachusetts and Connecticut at Ecco Stores and Stop & Shop Supermarkets.
- Monarch** (Reid, Murdoch & Co.). 18¢. Available nationally.
- Kitchen Garden Grade A** (Grand Union Co.). 14¢. Available in N. Y., N. J., Conn., Mass., Penna. and Vt. at Grand Union Stores. Labeled Grade A but tested Grade B.

- Blossom** (Sprague, Warner & Co.). 18¢. Two cans (same code) were variable; one can was fairly tender with fair flavor; the other was very tender with excellent flavor. Available nationally.

Snider's Lily of the Valley Vacuum Packed (Snider Packing Corp.). 12¢ for 12-oz. can. Available nationally.

Quality Hall Vacuum Packed (Fairmont Canning Co., Fairmont, Minn.). 14¢ for 12-oz. can. Available in Texas, La., Iowa, Minn., South Dakota, NYC, Chicago, Cleveland, Omaha, Los Angeles and San Francisco.

Trupak Vacuum Packed (Haas Bros.). 17¢ for 12-oz. can. Available on the West Coast.

Stokely's Finest (Stokely Bros. & Co.). 19¢. Available nationally.

Bohack's Fancy (H. C. Bohack Co.). 15¢. Available in Long Island and Brooklyn, at Bohack Stores.

Highway Vacuum Packed (Table Products Co.). 11¢ for 12-oz. can. Available in N. Y.; N. J.; Washington, D. C.; Richmond, Va. and throughout Western States at Safeway Stores.

Royal Guest (Independent Grocers' Alliance Distributing Co.). 16¢. Available nationally at IGA Stores.

Freshlike Vacuum Packed (Larsen Co., Green Bay, Wisc.). 15¢ for 14½-oz. can. Available in parts of the Midwest.

Nation's Pride Vacuum Packed (Milford Canning Co., Milford, Ill.). 14¢ for 12-oz. can. Four cans (same code) varied from Grade A to Grade C. Available nationally on a limited scale.

Premier Old Fashioned Vacuumized Grainlets (Francis H. Leggett & Co.). 16¢ for 12-oz. can. Four cans (two codes) variable: one can Grade A; the other three Grade C. Available East of the Mississippi, and in Texas.

Garden Patch Vacuum Packed (Minnesota Valley Canning Co.). 15¢ for 12-oz. can. Fairly tender. Available nationally.

Bohack's Fancy Vacuum Packed (H. C. Bohack, Inc.). 13¢ for 12-oz. can. Available in Long Island and Brooklyn at Bohack Stores.

Dodge Vacuum Packed (Haas Bros.). 16¢ for 12-oz. can. Available on West Coast.

GRADE C

Unless otherwise stated, the following were fairly tender with fair flavor:

- Blue Ridge** (B. F. Shriver Co., Westminster, Md.). 14¢.
- Superfine** (Chas. G. Summers, Jr., Inc., New Freedom, Penna.). 15¢ for 1 lb. can. One can flat sour. Available along Eastern Seaboard (west to Erie, Penna., Pittsburgh and Cincinnati; north to Boston; south to Mobile and Miami).

Sweet Life Vacuum Packed (Sweet Life Food Corp.). 16¢ for 12-oz. can. Available in N. Y.; N. J.; Springfield, Mass.; Pittsburgh and Detroit.

Bohack's Best Vacuum Packed (H. C. Bohack Co.). 15¢ for 12-oz. can. Available in Long Island and Brooklyn at Bohack Stores.

Charles & Co. Bon Voyage Line Vacuum Packed (Charles & Co., NYC). 15¢ for 14½-oz. can. Available in NYC at Charles & Co. Store.

Kroger's Country Club Quality (Kroger Grocery & Baking Co.). 13¢ for 12-oz. can. Available nationally at Kroger Stores.

White Rose Kernelettes (Seeman Bros., NYC). 14½¢. Available nationally.

Dodge (Haas Bros.). 19¢. Available on the West Coast.

Co-op Grade A (National Co-operatives). 15¢. Labeled Grade A, but variable: Two cans (same code) bought in NYC were Grade C; one can (different code) bought in Lincoln, Nebr., was Grade A. Available nationally at Co-op Stores.

Finast Vacuum Packed (First National Stores). 13¢ for 12-oz. can. Available in New England and New York State at First National Stores.

Peter Pan Vacuum Packed (Peter Pan, Inc., Chicago). 13¢ for 12-oz. can. Available in Northeastern, Midwestern and Southwestern States.

WHITE CORN

GRADE B

Unless otherwise noted, the following were tender, with good flavor:

- Co-op Economy Pack** (National Co-operatives). 13¢. Available nationally at Co-op Stores.
- Co-op Grade A** (National Co-operatives). 15¢. Available nationally at Co-op Stores. Labeled Grade A but tested Grade B.
- Tartan** (Alfred Lowry & Bros., Philadelphia). 15¢.
- Royal Guest** (Independent Grocers' Alliance Distributing Co.). 16¢. Tenderness and flavor variable. One can had a "swell." Available nationally at IGA Stores.

GRADE C

The following were fairly tender, with fair flavor:

- Tendersweet** (Iowa Canning Co.). 15¢. Available West of the Mississippi.
- Premier** (Francis H. Leggett & Co.). 14¢. Available East of the Mississippi and in Texas.
- Country Home** (Table Products Co.). 14¢. Available West of the Mississippi; also in Washington, D. C. and NYC.

Your Victory Garden

... some advice on watering, mulching, transplanting, fertilizing and other problems which may confront you

America's 1944 victory garden vegetables are well on their way toward the food-producing stage. But don't neglect them, just because you can see their green tops. At this stage plants need protection against drought, weeds and the undernutrition resulting from poor soil if they are to produce bumper crops, or even average ones.

WATERING

Low yield or loss of a crop is more often due to lack of moisture than to all other causes combined. There are few gardens which do not suffer at least two dry spells during the Summer; and unless growing conditions are unusually favorable, artificial watering is necessary.

Plants require either one inch of rainfall or its equivalent in watering every five to seven days. Thus, a piece of ground the size of a 9x12 rug needs at least 65 gallons or 26 ten-quart pailsful per week. But don't give the whole garden a little water every day, since a light watering merely teases the roots to the surface where they dry out worse than ever. *It's better to omit watering altogether if you can't do a thorough job of soaking the soil.* The treatment of young seedlings is an exception to this rule; they should have not more than $\frac{1}{4}$ inch of water at one time (a little over a pint per square foot).

Since it takes time and patience to give a garden the equivalent of one inch of rainfall, it's a good idea to divide the garden into sections and water a section at a time. Then look to your methods.

Don't go over the ground too fast when you are watering. It's best to avoid spraying with a hose nozzle or a "water wand" (a 52-inch tube attached to the hose, with a gadget for delivering a gentle stream instead of a spray). Both these methods are so slow that they overtax normal patience. The result is skimpy watering.

If your land is level a sprinkler, left in one place for about an hour, and then moved along, usually gives

best results. But avoid overwatering. If a sprinkler is left going for several hours in one spot the water may form channels down through the subsoil, causing the soil to dry out more quickly than ever for the rest of the Summer. Open tin cans, placed under the sprinkler as rain gauges, will tell how long to leave it. Check to see whether your sprinkler gives uniform coverage by setting cans at various distances from the center. If, as often happens, you find coverage poor at the edges, overlap your areas as much as necessary when you move the sprinkler, so that all parts of the garden are well covered.

If the garden is on a hillside, with narrow terraces or rows following the contours of the slope, using a sprinkler may cause soil erosion. For this kind of garden try a Soil Soaker Hose—an 18 to 50-foot length of porous canvas hose closed at the end. This is attached to the end of the garden hose and laid along a row. Careful adjustment of the flow of water results in good penetration with little or no wasteful run-off.

DRY WEATHER PLANTING

It is best to soak the soil thoroughly before planting seeds; soak with one inch of water, six to twelve hours before the final raking. When plants are to be set out, use only $\frac{3}{4}$ to $\frac{1}{4}$ of the water before planting; apply the rest after setting out, to help firm the soil around the plant roots.

An alternative method is to plant the seeds in dry soil and then spread over them about half the soil required for complete covering. Then water the row with a watering can from which the sprinkler head has been removed. Allow the water to soak in well, then cover to the proper depth with dry soil. In setting out plants by this method, pour a half to one pint of water in the hole with each plant. Then cover water and roots lightly with dry soil, leaving the surface dry, rough and slightly depressed so that it can easily catch and hold water.

WATERING DEVICES

BEST BUYS

Holland Rotary Sprinkler. \$1.50. Practically even, uniform coverage up to 30-ft. diameter, depending on water pressure.

Soil Soaker Hose. 18-ft., \$2; 30-ft., \$3; 50-ft., \$4.75. For irrigation of sloping or uneven ground.

ACCEPTABLE

Skinner Spray Wave. \$22.50. Oscillating Spray covering 50x40-ft. area. On skids. For large gardens and lawns.

C.B.G. Sprinkler. 75¢. The common cast-iron sprinkler. Its coverage is uneven, but it is cheap and does not get out of order.

NOT ACCEPTABLE

Spray nozzles of any kind. A temptation to inadequate watering.

Water Wand. \$3. Same objection as above. May be useful for special purposes, but not for general irrigation.

MULCHING AND CULTIVATING

Plants, weeds and evaporation compete vigorously for the available water supply. Mulching and correct methods of cultivation will minimize the competition.

A mulch of leaves, grass clippings, hay or other adequate material may be applied at any time after the soil has become warm and all the crops are well up. Mulching is particularly helpful to slow-growing plants like tomatoes and pole beans. When a whole garden is mulched, yields are often increased by 100 per cent.

This method of moisture conservation is recommended especially to week-end gardeners because it reduces the labor of cultivating and watering to a minimum; you may even take a two-week vacation, and return to find your garden still in good condition. The only disadvantage of mulching is that in the planting of succession crops the mulch must be removed between crops.

Before spreading a mulch, soak the soil well if it is dry, cultivate to kill weeds, and fertilize lightly. Here are some cultivating rules which should be followed regardless of whether or not you plan to use a mulch:

1. Cultivate whenever a crust starts to form. Crust interferes with seedling emergence and water absorption.

2. Cultivate in the heat of the day. Weeds are most easily killed then, and working among plants when their foliage is dry minimizes the

danger of spreading any disease which may be present.

3. *Do not cultivate deeply or hill the soil about the plants* (except potatoes). Cultivation more than one inch deep cuts off roots and dries the soil.

4. *Cut off large weeds growing close to a plant.* Pulling the weed will dry and injure the roots of the crop plant.

5. *Do not cultivate immediately after a light rain.* This would result in drying of the wet topsoil and water loss, not gain.

6. *Do not cultivate loose, open, weed-free soil.* Turning up moist soil to the air results in needless further drying of the soil.

The application of a mulch is the final step in your moisture conservation program. Buy local materials, if possible, to save expense. Only the more commonly used materials are mentioned below.

MULCHING MATERIALS

EXCELLENT

Peat moss. Probably the most convenient material when a large area is to be covered, but expensive. If it is caked into a hard mass it must be wet before using. Spread it one to (preferably) three inches deep. At the end of the season it may either be dug in or raked off and stored for use the following year. Warning: Peat usually cannot be dug in more than two or three years in succession without making the soil too fluffy.

Sani-Soil (Redwood bark). Price about the same as peat moss. Convenient, but varies in different localities. Spread two inches deep. May be dug in or stored for use the following year.

Partly decomposed leaves. Leaves gathered in the Fall into flat-topped piles which have become well soaked during Winter and Spring. Spread the wet leaves one inch thick.

Grass clippings. These are better left on the lawn after cutting, since growing grass needs the nitrogen they contain; but if you insist on raking them off or if you can collect them from neighbors who insist on raking their lawns, they can be used as a mulch. They should be spread at least two inches deep; but not more than one inch should be spread at a time, since grass clippings heat quickly. After the first layer has dried more may be added. A grass mulch must be continually renewed because it deteriorates rapidly.

Sawdust or shavings. These may be cheap in some sections, but should be mixed with limestone except in limestone-soil areas. Sawdust is particu-

larly good when mixed with limestone and fertilizer or manure. Spread not more than two inches deep, and do not dig in at the end of the season.

Excelsior. You may have enough for a few plants. Use in the same way as shavings.

ACCEPTABLE

Cured hay. Spread four inches deep. May bring in weed seeds.

Marsh hay cut in short pieces. Spread four inches deep. Do not dig in as it decays too slowly.

Large weeds, taken before they go to seed. Should be four inches deep.

Glass mulch. Good, but too expensive.

NOT ACCEPTABLE

Mulching paper. Hard to keep in place, and excludes air. (Tar paper or heavy building paper is good to spread over areas where you wish to kill grass or weeds.)

Straw. Does not prevent the growth of weeds, and presents a fire hazard.

Dust mulch. This is of doubtful value in conserving water.

CHEMICAL FERTILIZERS

"Should Victory Gardeners Use Chemical Fertilizers? Experiments raise startling question," says an ad for the little magazine, *Organic Gardening*. Then follow some arresting objections: that the use of chemical fertilizers is depleting the soil and undermining the health of men and livestock; that chemical fertilizers kill the earthworms without which successful gardening is impossible; that children fed entirely on food raised with homemade organic fertilizer (compost) made by a special process were more robust than the average child.

Scientific agronomists have no patience with such statements. The cigarette ads, they say, should teach us that experiments made under favoring auspices can "prove" anything. It is not true that chemical fertilizers kill earthworms; it is the amount of organic matter for them to feed on that controls the size of the earthworm population. Anyway, excellent crops can be grown *without* earthworms.

Chemical fertilizers should not be regarded as a substitute for organic matter (manure or compost), which is indispensable for long-range soil conservation, but only as a means of feeding current crops. If large amounts of organic matter are added to the soil, and if the acid-alkali reaction is kept right by the use of lime, chemical fertilizers will not "deplete

the soil" even over a long period. Without them, results are likely to be too slow for the victory gardener. The type of chemical fertilizer which your vegetable garden needs contains nitrogen, phosphoric acid and potash. The Victory Garden Fertilizer is such a mixture.

STARTER SOLUTIONS AND LIQUID FERTILIZERS

Application of chemical fertilizers in *liquid* form as starter solutions and side dressings has begun to replace the standard practice of broadcasting the fertilizer *dry* and ploughing or digging it in before planting. (When the latter method is used extra fertilizer, applied in bands near the plants, is sometimes used as a booster later in the season.)

Spectacularly increased yields have been obtained through the use of weak starter solutions poured over the seeds or around transplants at planting time; and experiments seem to show that side dressings of a stronger solution, replacing the bands of dry fertilizer ordinarily used, may even be able to supply the whole chemical-fertilizer need of a crop.

Since very much less fertilizer is required for liquid applications than for dry, fertilizer manufacturers don't encourage this particular development. However, at the New Jersey Agricultural Experiment Station the use of liquid fertilizers has been put on a practical basis with the

Watch for . . .

Work on the following reports, among others, is either now under way or scheduled to begin soon:

Toilet Soap

Dentifrices

Clinical Thermometers

Toilet Tissue

All-Purpose Flour

Tuna Fish

Tomato & Grapefruit Juice

Cola Beverages

Knitting Yarn

result that farmers have been saving on their fertilizer bills. We suggest that you send for the New Jersey Station's recently published leaflets which give details for the use of starter solutions and liquid side dressings for each crop in the home garden: Series 21, No. 8, *Growing Leafy Vegetables in New Jersey*; No. 10, *Growing Beans and Peas in New Jersey Home Vegetable Gardens*; No. 11, *Growing Tomatoes*. (Write to the New Jersey State College of Agriculture, New Brunswick, N. J.) Since all New Jersey soil tends to be too acid, these bulletins emphasize the need for lime to counteract this condition. Your garden may not need lime (many New York gardens, for example, are sick from over-liming). Apply limestone *only* if your soil does not grow beets or spinach well or if a soil test *made by an expert* indicates a need for it.

HOW TO USE LIQUID FERTILIZERS

Starter Solutions are poured directly on the seed as it is planted, at the rate of $\frac{3}{4}$ cup per foot of row. Starter solution is not used for root crops (except sweet potatoes), but it is recommended for all others. For transplanting, $\frac{3}{4}$ cup is poured around the roots of each plant and the soil is filled in loosely. (Do not pack!)

Side dressings of fertilizer in water must be applied in small quantities as the plants need the nutrients. The time and strength of applications depend on the crop. Short season crops like snap beans, spinach and corn must receive their fertilizer early. In addition to the starter solution, one weak application as the sprouts appear is enough for such crops.

Long-season crops like lima and soy beans, tomatoes and cabbage may be planted with a starter solution and side dressed later at two or three week intervals. For these a stronger solution is used. Rows of growing plants need about one quart per yard. For single plants a foot high use one pint each; for tomatoes with ripe fruit and broccoli from which you cut buds use one quart per plant.

Fertilizers having an analysis of 13-26-13 (13 units of nitrogen, 26 of phosphoric acid, and 13 of potash), or 11-32-14—completely soluble in water and about neutral in acid-alkali reaction—have been found best for general use. The ordinary Victory Garden Fertilizer (5-10-5) will give

almost as good results; but it is less convenient because it is not completely soluble, and the insoluble residue must be discarded in order to avoid burning the plant roots. Solutions of Victory Garden Fertilizer should be made a day in advance by hanging in the water a bag containing the correct amount of fertilizer.

The amount of fertilizer to use depends not only on the crop grown, but also on the analysis of the mixture, particularly the nitrogen content. The New Jersey Station recommends:

For Starter Solutions

3 tablespoonsful of 13-26-13 in 12 qts. of water.

or

$\frac{3}{4}$ to one teacupful of Victory Garden Fertilizer in 12 qts. of water.

For Side Dressings (exact strength depending on the crop)

6 to 9 tablespoons of 13-26-13 in 12 qts. of water.

or

2 to 3 teacupful of Victory Garden Fertilizer in 12 qts. of water.

For mixtures having different analyses, follow the manufacturers' directions.

The special mixtures sold under various brand names for making solutions vary widely in quality, analysis, convenience and price. Some of these are rated below. In general, liquids (*Kem*, for example) are too low in analysis and too expensive; tablets are inconvenient and expensive; and some dry mixtures are too low in analysis, particularly in nitrogen which is the most expensive element in the formula. Be sure to look for analysis figures. A few products are advertised to contain vitamin B. This can safely be ignored, since it appears to have little or no value for growing plants.

FERTILIZERS FOR LIQUID DRESSINGS

BEST BUYS

Vitasalt 13-26-13. (Courtman Chemical Co., Elizabeth, N. J.) 90¢ for 2 lb. Same as the mixture used by commercial growers. Good.

Hy-Gro 13-26-13. \$1 for 20 oz. Similar to Vitasalt, but slightly more expensive.

ACCEPTABLE

Victory Garden Fertilizer or any other complete fertilizer. About 80¢ for 10

lb. Don't buy **Vigoro** (50¢ for 5 lb.) or **Loma** (75¢ for 5 lb.) unless you like to pay for the brand name. When bought in small packages the cost per ounce of plant nutrient is higher than for **Vitasalt** or **Hy-Gro**.

Rapid-Gro 23-27-17 with vitamin B. Good, though expensive. High analysis (strong concentration of plant nutrients) makes it easy to burn roots by putting on too much. The vitamin B does neither harm nor good.

Burpee-Gro 7-13-26 with vitamin B. \$1 for 200 tablets. More expensive, lower in nitrogen and less convenient than the "Best Buys."

Take-Hold. 35¢ for 3 lb. Good enough, but quality not equal to "Best Buys."

NOT RECOMMENDED FOR GARDEN USE

Kem and other similar liquids. \$1.25 for 1 gal. Very low analysis. Too expensive.

Cuddy's Plant Tablets. Lack potash, so not a complete fertilizer. Too expensive.

Hyponex. \$1 for 1 lb. Good for soilless culture (a hobby at the present stage of development), but too expensive for use on the soil.

Plantet. 75¢ for 1 lb. For soilless culture.

Abunda-Gro. For soilless culture.

Vitamene and other vitamin B products. Usually have no value for plant growth.

COMPOST PILES AND ACTIVATORS

To supply the organic fertilizer needs of your soil, good compost is a satisfactory substitute for manure, which is expensive and often unobtainable.

By proper processing in the presence of heat, moisture and air, all manner of organic waste, from grass clippings and leaves to greaseless garbage, can be broken down to a colloidal humus whose chemical elements are readily available to growing plants. Garden refuse should be composted; it should never be dug directly into the soil where decay organisms compete with growing plants for the nitrogen which both require. The yellow color of plants indicates when such competition is robbing them of nitrogen.

Methods for making composts vary, but a good way is to alternate layers of plant refuse and loam. Dig a hole, or strip the topsoil and fence a small area; or use a large crate. Arrange the green waste material, coarse and fine mixed together, in a flat layer a few inches thick. In summer diseased foliage may safely be

decomposed; the heat of the pile will destroy the fungi just as it will kill weed seeds if they are buried deep inside the pile. In the Fall infected refuse should be burned to prevent infection.

Do not use peat, and use no more than 5% by volume of sawdust or shavings, since these materials decompose very slowly. Don't collect leaves from under shrubs to add to your pile, for shrubs are greatly benefited by a permanent mulch of leaves.

Extra nitrogen is usually added as an activator—food for the decay organisms—to hasten the rotting process. This nitrogen may be supplied by either chemical or organic fertilizer, or both. Add a little horse, cow or poultry manure to the layer of green refuse, if you can get it. But there is no need to buy "miraculous" or "wonderworking" commercial products to serve as extra food for decay organisms. In the absence of manure, or in addition to it, sprinkle the layer of refuse with Victory Garden Fertilizer and powdered limestone.

Then moisten the pile with a hose, but do not flood it lest soluble plant food be leached away. Finally, cover the layer with $\frac{1}{2}$ inch or more of the loam stripped from the soil under the pile. Repeat this entire process until the pile is three or four feet high, then start another.

Be sure to keep the sides of the heap straight, and leave the top saucered to catch rain. If the season is dry, hose the pile to keep it moist *but not wet*. Each pile should be turned over twice—four weeks after it is completed and again four weeks later. If only one turning is possible before cold weather stops the decomposition process, it's best to wait until the pile has aged for 50 days.

QUICK DETERIORATION

Since finished compost deteriorates rapidly, it should be used immediately. After it has become dark in color and practically odorless, dig it into the upper few inches of topsoil. If it is not convenient to use it at once, wet the heap thoroughly and compact it by trampling. This excludes air and slows deterioration.

For an excellent bulletin on making compost, send 5¢ to the Bulletin Clerk, New Jersey Agricultural Experiment Station, Brunswick, N. J., for Circular 470, *Synthetic Manure* (free to N. J. residents).

HEALTH AND MEDICINE

HAROLD AARON, M. D., SPECIAL MEDICAL ADVISER

MEDICAL CONSULTANTS: Dr. Anton J. Carlson—Chairman, Dep't of Physiology, University of Chicago; Past President, American Physiological Society; Dr. Theodor Rosebury—Assistant Professor of Bacteriology, College of Physicians & Surgeons, and School of Dental and Oral Surgery, Columbia University; Dr. Marion B. Sulzberger—Ass't Professor of Clinical Dermatology and Syphilology, New York Post-Graduate Medical School, Columbia University; Editor, Journal of Investigative Dermatology.

CU'S Medical Consultants give technical advice on matters of medicine which lie within their fields. CU is responsible for all opinions concerning social, economic and public health questions.

Frigidity

Because of the vast amount of misinformation which is current on such problems as that dealt with in this article, CU has been urged by physicians and educators to treat these problems in its medical section, just as it treats other medical problems. In view of the wide use of CU REPORTS in the schools, however, CU has hesitated to publish this type of material in the REPORTS. It was finally decided that it should be published in the Summer months, when the REPORTS are not used in classroom work. We shall welcome comments from our members as to the advisability of our publishing articles of this nature in the future.

"Female disorders" — menstrual disturbances, menopause, glandular disturbances and frigidity—make up an important part of medical practice. And, though many women suffering from frigidity are reluctant to discuss the problem even with their physicians, it is probable that this ailment causes more distress and unhappiness among women than all the others. Unfortunately, many physicians are as ill-equipped as their patients to handle the problem of frigidity; too often the patient's complaint is dismissed with a word of reassurance or a suggestion on "technique."

VARIATION FROM NORM

Frigidity is a state of marked lowering or total absence of sexual responsiveness. It may occur in varying degrees, and for varying periods. It is not abnormal for women to have a periodically lowered response to sexual intercourse. But when this lowered response becomes characteristic, or when the sexual relation is more or less constantly associated with disgust, fear or pain, true frigidity may be said to be present.

Frigidity may be a superficial, easily corrected condition; or it may be

deep-seated, and require extensive psychiatric treatment for its correction. But in either case, the cause is some sort of emotional disturbance, which leads to inhibition and failure to enjoy a normal function.

In cases where the frigidity is more or less superficial, relief can generally be obtained through an understanding of the causes. Unfortunately, however, the emotional tangle which may be responsible for the frigidity often affects the woman's attitude toward correcting the condition. She refrains from seeking help because of the feeling that it will, in some undefined way, be a reflection on herself or her husband. Or, unable to break the mental bonds of a still lingering attitude toward woman's role in society, she accepts her difficulty as one of the unavoidable consequences of her "inferiority" to men.

Frigidity is neither a disease nor an hereditary condition. Moreover, it is seldom if ever caused by physical disorders or glandular disturbances. Local disorders of the genital system are rarely the cause of painful intercourse and hence frigidity, and if the disorder is corrected, frigidity will eventually disappear. But in chronic

frigidity, the pain is bound up with emotional reactions of apprehension, resentment or disgust.

Two of the most common superficial causes of frigidity are fear of pregnancy and the unsympathetic general attitude of the husband.

Fear of pregnancy—whether it be based on economic or social insecurity, on abnormal fear of childbirth, or on other causes—may profoundly influence sexual responsiveness. Where this is the case, a gynecologist should be consulted.

One method of birth control—coitus interruptus (withdrawal before ejaculation)—is considered to be a frequent cause of frigidity. The method is open to several serious objections. In the first place, the practice requires an unusual degree of self-control, and may in time diminish the man's potency and bring on nervous symptoms. His wife's responsiveness is also likely to be affected, particularly if her climax is usually not reached; for repeated sexual frustration of the woman develops in her a resistance to being aroused, as a self-protective mechanism against the anticipated disappointment. Nor is fear of pregnancy eliminated by this method. The woman's uncertainty that withdrawal will take place in time merely adds to her anxiety, and the fear and the frustration form a dangerous combination. Frigidity is sometimes the result.

Many books on "marriage advice" tend to give a somewhat distorted view of the husband's role by emphasizing the mechanical aspects of the sex relationship. Actually, the more important factor, so far as the husband is concerned, is not his so-called "technique," but rather his general attitude toward his wife. Tenderness, affection and the encouragement of self-expression in everyday life can go a long way toward overcoming the sexual inhibitions of a woman. Unfortunately, many men who acknowledge this as a sound principle fail to carry it out in practice.

PARTNERSHIP RELATION

The husband who treats his wife as a real partner in all their activities—who earns her respect as a partner and her affection as a companion—will tend to carry over this attitude in their sexual relationship. And the wife, in turn, will find it easy to be free, relaxed and uninhibited.

By the same token, sexual relations when both parties—not the man only—desire them, must be considered the most desirable arrangement. But it is rare for two persons to have exactly similar sexual drives, and in most cases a compromise must be reached. Indeed, a successful relationship may be said to be a condition of successful compromise between the instinctual drives of husband and wife—a condition which develops gradually over a period of perhaps a year or two. Often frigidity disappears as husband and wife learn to understand each other's capacities and make the necessary adjustments, when the man appreciates and understands the emotional handicaps a woman may bring to marriage.

But a great many—possibly the majority—of cases of frigidity stem from an emotional conflict so severe and deep-seated that the woman is unable to acknowledge, even intellectually, the importance of the sexual relationship as a biological and emotional release. In such cases, treatment by a psychiatrist is the only way to free the woman from sexual inhibition.

UNCONSCIOUS CONFLICT

Such strong emotional conflicts are generally not conscious; usually they arise out of faulty childhood education with respect to the sexual organs and functions.

Every child, in early years, is curious about his body; he finds all parts of it interesting. But in many homes, children soon learn that different parts of the body are to be regarded in different ways—some are "dirty," some are not; some parts may be touched, others may not be if disapproval or punishment is to be avoided.

A curiosity about the difference between the sexes, and a desire to know where babies come from are also a natural part of the child's desire for knowledge about the interesting world around him. Unfortunately many parents do not regard it as such. Frequently, as a result of their own distorted attitudes, they look upon sexual curiosity not as they do on other forms of curiosity; they consider it something "dirty" and unwholesome, which they must do their best to stamp out. Though they answer other questions truthfully, those about sex are evaded or answered with lies or reprimands. Signs of sexual curiosity and activity are

harshly curbed with warnings, threats or punishment.

CURIOSITY SUPPRESSED

As a result, the child stops asking questions, at first simply to escape punishment. But as time goes on, the child gradually accepts his parents' sex taboos; he takes over their attitude as a token of his love for them, and in order to keep their love for him. As a result, sex becomes something filthy and sinful; something to be avoided at all costs.

Such training may go on throughout childhood, and by the time the child is grown up, the unhealthy reaction toward sex may have become so deeply ingrained that it has become automatic and very hard to uproot. Furthermore, by this time the attitude is largely unconscious; it has become a part of the personality.

This kind of childhood training encourages the development of many peculiar misconceptions. The refusal to answer the child's questions stimulates him to invent fantastic explanations of his own, or to accept the "gutter" version currently prevalent in the neighborhood.

Actually, children are very observant. When the little girl notices how Mrs. Jones, next door, looked before and after the new baby came, she is likely to put two and two together, and to conclude that the baby was formerly in its mother. But she doesn't know how the baby got there, or how it got out. When her innocent and natural question is answered with disgust, or with a fairy tale so lacking in plausibility that she can't help seeing through it, she sets to work to explain it to herself. Usually she connects her only experience with matter coming out of herself (the stool) with her mother's expression of distaste; she concludes that babies are born through the bowel, and that it is a dirty and disgusting business.

FEAR OF INJURY

From observation of animals—either personal or second-hand—and from the ingrained conviction that everything connected with sex is somehow wrong, the child conceives of sexual intercourse as a fight between the partners, in which the woman is injured. With this misconception as a basis, the first appearance of the menses may become a frightening and degrading experience. Added to it may be the idea—still accepted by many women—that dur-

ing menstruation (a sexual manifestation) the woman is unclean, and is getting rid of poisonous matter.

Infantile theories, beliefs and fears about sex, conscious at different periods during childhood, become submerged into unconsciousness in the adult; but their effects may linger. Long after a woman has learned the true facts regarding sex, feelings of fear, shame, guilt and disgust may continue to be associated with sexual experience. Intellectually and consciously, she may learn to regard sex activity as normal and healthy; unconsciously she may carry over the fear and disgust of childhood. And with such a basic, childish attitude toward sex, a healthy grown-up relationship is impossible.

Sometimes the woman's attitude toward the discovery that her childhood attitudes were incorrect takes the form of a strong reaction. Upon learning that the world does not accept the attitude of shame and disgust, she may grasp the other extreme, and turn to promiscuity, regarding sex as a light and trivial thing. Rebelling against the old pattern of shame, she makes the sex act something cheap and without significance, robbing it of its rich, human values. Such a person may be as truly frigid as one who retains the old, unhealthy attitudes.

"SANCTITY"

Still another reaction against early training takes the form of clothing sex in sanctity and holiness. The woman expects some sort of exalted, heavenly relationship, and is disappointed in finding merely a human one. The result is frequently frigidity. Books glorifying sex stimulate such false expectations, which are inevitably doomed to disappointment. Anything that tends to dehumanize sex—whether to make it filthy, trivial or holy—interferes with a healthy attitude toward it.

AID TO THE "UNCONSCIOUS"

The portion of the mind the psychiatrists refer to as the "unconscious" is not simply a static collection of suppressed childhood experiences. Rather, it is a dynamic state, which continuously influences the adult behaviour. Inhibition of the sexual function, as manifested by frigidity, is frequently the result of the operation of the unconscious mind.

Although some cases of frigidity, in which the causes are clearly under-

stood and are not too deep-seated, may be overcome by understanding and sympathetic cooperation of the partner, psychiatric assistance is essential if the frigidity is deep-seated, severe or of long standing. Sometimes a few consultations with a psychiatrist can restore the normal function. But months or even years may be

necessary, if there is an attendant severe nervousness, to release the adult woman from slavery to her childhood education — her "unconscious"—and to channelize the energy of this unconscious away from emotional and sexual disturbances and into fruitful life work and relationships.

NEWS AND INFORMATION

Rural Health in the U.S.

... and how it could be improved by a national health plan

The National Physicians Committee for the Extension of Medical Care, unofficial creature of the American Medical Association and supported by patent medicine companies, commercial insurance companies and drug store chains, has put out several pamphlets denouncing the Wagner-Murray-Dingell Bill. Published in millions of copies and distributed throughout the country, the pamphlets condemn the bill as a "threat to free enterprise," "political medicine," "bureaucratic medicine," etc.

CU has pointed out in previous reports the deceptions, exaggerations and falsehoods of which the publications of the National Physicians Committee are guilty. One statement, reiterated in many pamphlets, that "the health of the American people is better than it ever was," and that "we are the healthiest nation in the world," bears further analysis.

It is ironical that these pamphlets should be heavily distributed in the rural sections of the U. S., for it is these sections that are most desperately in need of a social security and health insurance program as provided in the current Wagner-Murray-Dingell Bill. It is in rural areas that the most serious and alarming deficiencies in health facilities, personnel and services prevail.¹

HOSPITALS IN CITIES

The development of the modern medical center and hospital has occurred mainly in the large cities of the U. S. Rural areas cannot now

support what they need in the way of physicians, dentists and hospitals. They lack the corporate and individual wealth necessary to provide the tax funds, endowments and fees essential for medical service and hospitals. The rural States are least equipped to provide for these, and are therefore more acutely in need of Federal government support.

Even before the war, there was a very serious shortage of physicians in rural areas. In 1908, about half of the young medical graduates settled in places of less than 5,000 population. In 1931, less than a fifth became rural practitioners, even though at that time 48 per cent of our population was rural. And this trend has continued. The net effect has been that country doctors have become a steadily aging group, unable to meet the needs of their communities, and there are fewer and fewer young men replacing them.

LOCATION OF NEW DOCTORS

The young, alert medical graduates go to the wealthier States and to the wealthier parts of a State. New York State, with 10% of the population, got 18% of the new physicians in 1940-41; Alabama, with 2% of the population got only 0.3% of the new medical graduates. (All this before the war had started, pushing the percentage still lower in rural areas.) Young physicians dislike going to rural areas not only because it is hard to make a living there, but also because the facilities and opportunities so necessary for advancement in medical training are lacking in these areas. The modern medical graduate is lost without a good hospital. High

¹ Facts about rural health were obtained from National Health Survey, 1935-38, and for the last few years from data of the Farm Security Administration and the U. S. Department of Labor.

quality medical care demands hospital facilities, and because rural areas lack adequate hospital facilities, the quality of medical care given is poorer there than anywhere else in the country. This is particularly true in the Southern States.

WAR LOSSES

The war has greatly accentuated the unequal distribution of physicians. Procurement and assignment, under the control of the AMA, botched up the job of getting physicians for the armed services. The rural States suffered serious losses in physicians. Today ratios of one physician to 3000, 5000 or even 10,000 people are common in rural districts.

After the war, the situation may become even more serious, since many rural doctors now with the armed services will not want to return to their home towns, but will prefer to settle in the wealthier urban centers.

The shortage of dentists is even more acute and the maldistribution more serious. According to the Farm Security Administration, dental care is unknown among a great many low income farmers and farm laborers.

As already stated, hospital facilities are grossly inadequate in rural areas. Although the Southern and the Northeastern States have about the same population, the Northeastern States have two and a half times as many general hospital beds. Besides, the smaller rural hospitals are

less efficient, more costly to run, are privately managed without community control of any kind, generally lack free beds or wards and are poorly staffed with doctors and nurses. In some hospitals, there isn't a single graduate nurse on the staff.

Public health facilities are also grossly inadequate. Even before the war, about 1400 counties had no full-time public health officers; 700 did not have a public health nurse. Health centers are insufficient or nonexistent. In many communities, the Health Department is located in the courthouse basement. Three out of four lack proper sanitary facilities.

In sum, rural medicine in the United States is just about where medicine as a whole was about 50 years ago.

Farmers are aware that the medical and hospital services available to them are inadequate. But they do not realize what a toll in health these deficiencies are taking. Death rates in the cities have fallen 50% since 1900; in rural areas, the death rate has fallen only 32%. The death rates in rural areas are highest for those diseases that modern medicine is best able to prevent—typhoid fever, malaria, diphtheria, pellagra, pneumonia and influenza. The maternal mortality is higher. Self-medication with quack and patent medicines is commonplace. Selective service reports show the highest rate of rejections among farm boys.

HEALTH COULD BE BETTER

In the face of this appalling health situation, the National Physicians Committee has the effrontery to say that health conditions in the U. S. are good, and that nothing should be done to change the status quo. Of course America is healthier than India or China or most European countries. But it is not healthier than Australia, New Zealand or Sweden. Considering the fact that we have the most modern medical facilities in the world, and the best medical schools, health conditions in the country are much poorer than they could be. The enormous gap between our medical potential and its application to the needs of the people can only be closed by the participation of the Federal government in a broad social security and health program.

The Farm Security Administration has made noteworthy attempts to provide some kind of medical care for rural areas during the war. Volun-

tary pre-payment insurance has been set up in agreement with the State medical societies and "Blue Cross" plans. In many cases, the FSA has had to loan money to the farmer to pay his fee to the health plan. Or direct grants to indigent families have been made by the Federal government, to enable them to participate. Altogether, about 100,000 farm families are receiving a minimum of medical care through these plans.

The greatest defect in these voluntary plans is that the traditional fee-for-service medical practice is kept intact. As a result, the quality of medical service given to the farmers has not been raised and there is a constant pressure on the part of medical societies to raise the rates in order to increase medical fees.

DEFECTS OF VOLUNTARY PLANS

The FSA-Medical Society plans for rural areas illustrate the serious defects in all voluntary methods of health insurance. Until the whole rural population is brought into a health insurance program through a compulsory system, the plan can never be financially sound. Under a social-security plan, as in the Wagner-Murray-Dingell Bill, 110,000,000 people—farmers as well as urban, employed and self-employed—would contribute to one large insurance fund. This large insurance pool could provide more efficient and cheaper service than a small voluntary insurance pool. It could take care of most of the serious inequalities and deficiencies in the rural areas. A compulsory system of health insurance must be on a Federal basis because farm States haven't the financial resources to carry it through alone, and in order to acquire the large number of subscribers necessary to make the plan financially workable.

A Federal compulsory health insurance system would also provide the security of income that young doctors need before they can be persuaded to settle in rural areas. The construction of new health facilities, diagnostic health centers and mobile clinics would provide the intellectual and scientific incentives that a doctor needs when he practices medicine intelligently. The farmers of America must learn that their physical and mental well-being, their earning and working capacities demand the passage of a Federal social security program like the Wagner-Murray-Dingell Bill.

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